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England's Interest:

OR, THE

Gentleman and Farmer's Friend.

SHEWING,

1 How Land may be improved from 20 s to 8 *l.* and so to 100 *l. per* Acre, *per Annum*, with great Ease, and for an inconsiderable Charge. 2. The best and quickest Way of raising a Nursery. 3. How to make Cyder, Perry, Cherry, Curran, Goose-Berry, Mul-berry, and Birch Wines, as strong and wholesome as *French* and *Spanish* Wines; and the Cyder and Wines so made, to be sold at 3 *d. per* Quart, tho' as good as Wine now sold for 18 *d.* 4. Directions for Brewing the finest Malt Liquors, Better and Cheaper than hitherto known; shewing what Care is to be taken in the Choice of Water, Malt and Hops; and how they are to be mixed, boiled, and fermented, for making the best *March* or *October* Beer, strong Ale, *&c.* 5. Instructions for Breeding Horses much Cheaper, and to a far greater Advantage than ever yet known. 6. Of the Husbandry of Bees, and the great Benefit thereby. 7 Instructions for the profitable ordering of Fish-Ponds, and for the Increase of Fish. 8. A Guide for young Anglers, teaching them the best Method of catching Trout, Carp, Barbels, Jacks, Pikes, Perch, Roach, Dace, *&c.* As also how to Dress them after the newest Fashion. Lastly, Physick for Families, containing many useful Medicines for several Distempers, particularly the Plague.

By Sir *J. MOORE. K.*

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England's Interest:

OR, THE

Gentleman and Farmer's Friend, &c.

CHAP. I.

Of the Improvement of Land; and how Land may be Improved from 20 s. *to* 8 l. *and so to* 100 l. *per Acre, with great Ease, and for an inconsiderable Charge.*

TO deny that *Land* is capable of Improvement, is to contradict the Experience of the present and former Ages; and to deny a Truth as obvious as the *Meridian* Sun; for how many Acres of Land in the Fen Countries, formerly no better than the *Irish* Bogs, are now, by Draining, and

other Improvements, made as good *Land* as any in *England*? And the ſame Improvement that is made of *Land* in the *Fen Countries*, in one reſpect, may, in other reſpects, be made in any other Country. And therefore, that *Land* may be Improved, is what I preſume none will deny; and that it may be done to a far greater Advantage than what has been hitherto practiſed, is what I am now to demonſtrate. And in this Demonſtration I will not inſiſt on the Improving of it by that *Marle*, or *Soil*, which does ſo much inrich it, and is ſo eſſential to its Fructifying, and its Producing of all ſorts of Fruit, and that early too; (of which the Lands adjacent to the City of *London*, and other Cities, are a ſufficient Proof) for this Improvement is only to be made where Plenty of Soil is eaſy to be had; but I will demonſtrate it from that which every Country can eaſily do, and which even the moſt *Barren Lands* are in a great meaſure capable of; and that is, the Improving of it by the Planting of Fruit-Trees, for the making of *Cyder*, *Perry*, &c. And certainly, if the greateſt Improvement of Land in *France*, be by their Planting Vine-yards, (by which, alſo, ſo great a Revenue ariſes to the *French* King) it muſt be equally a conſiderable Improvement that muſt be made by the Planting of *Fruit Trees*; eſpecially if of the Fruit thereby produced, may be made as generous a Liquor, as any that the Grape produces in *France*.

THIS Improvement of Land, by Planting of Fruit-Trees, is thus demonſtrated:

1. Eight-

I. Eightſcore Trees, *viz.* Red-Streaks and Golden Pippins, may conveniently be Planted upon one Acre of Land, each ſtanding ſixteen Feet diſtant.

II. Theſe Trees cannot be ſuppoſed to bear leſs than one Buſhel on each Tree, one with another, that is eightſcore Buſhels; and 'tis well known, that twenty Buſhels of Apples will make a Hogſhead of *Cyder*; ſo that there will be yielded eight Hogſheads on an Acre.

III. Theſe eight Hogſheads of common *Cyder*, will make four Hogſheads of *Cyder-Royal*, full as good and ſtrong as *French* Wine, (as we ſhall ſhew at large in our third Chapter) which, at 2 *d. per* Quart, is 2 *l. per* Hogſhead; and ſo the four Hogſheads yield eight Pounds, the Product of one Acre.

BUT in caſe it be ſold at 4 *d. per* Quart, as moſt certainly it may, ſince this *Cyder-Royal* will be as good as any Wine ſold at 18 *d. per* Quart, then the Product of this Acre, thus Planted, may be worth 32 *l.* beſides the Profit of the Graſs or Corn growing the ſame Year on the ſame Acre of Land. For if you Plant your Trees at the diſtance of twenty Feet one Way, and but twelve the other, (which is all one with ſixteen Feet before-mention'd) you may Plough well enough between them.

BUT further, If *Gooſe-Berries* and *Currants* be planted amongſt the *Apple-Trees*, (as very well they may) and that will prove much the better Husbandry; then there may be more than four Hogſheads of *Wine Royal* made in a

Year of them, and much better than the other; ſo that at the ſame Price, *viz.* 2 *d.* a Quart, there will thereby be 8 *l.* more raiſed, that is 16 *l. per Annum*, from the ſame Acre of Ground.

BUT ſince 'tis uſual for *Apple-Trees* to bear ſome four Buſhels, ſome five, ſix, ſeven, and upwards, to twenty Buſhels, 'tis very probable that one Tree with another, may bear four Buſhels; whence may be produced ſixteen Hogſheads of *Cyder-Royal*; which at 3 *d. per* Quart (that is 3 *l.* the Hogſhead) comes to 48 *l.*

NOR is it it unreaſonable to believe, that the Product of *Gooſe-berries* and *Currans* may amount to much more than the 8 *l. per Annum*, at which we have computed it. For I know by Reaſon and Experience, that Curran-Trees and Gooſe-Berry Trees, one with another, well Husbanded, may yield one Gallon a-piece: And upon one Rod of Land may be planted ſixteen Trees, each four Feet from another, (which is a competent diſtance) ſo that one Rod may produce two Buſhels of Currans and Gooſe-berries; and conſequently there being eight-ſcore Rods in an Acre, there may ſixteen-ſcore Buſhels grow thereon; which yielding ſixteen Hogſheads of common Wine, makes eight Hogſheads of *Wine-Royal*; which, at 3 *d. per* Quart, comes to 24 *l.* which being added to the 48 *l.* made by *Cyder*, (according to the laſt Computation) makes 70 *l. per Annum*, at 3 *d. per* Quart: But ſold or valued at 6 *d. per* Quart, the total Product from one Acre of Ground (now worth not above 20 *s. per Annum*) will amount to double the aforeſaid Value, that is to ſay, to 144 *l. per Annum*.

NOR

NOR do I know why any ſhould contemn, or deny this, as an extravagant Calculation; however, a Thing impoſſible it cannot be, for theſe two Reaſons:

FIRST, That one Apple-Tree may bear thirty Buſhels at a time, and one Curran-Tree ſix Gallons, and one Gooſe-berry-Tree four Gallons; whereas I here reckon but four Buſhels inſtead of thirty, and but one Gallon inſtead of four or ſix.—— And as for ſelling it at 6 *d. per* Quart, this I am ſure of, that the Cyder and Wines made as I ſhall ſhow in my third Chapter, are as good, and as well worth 18 *d. per* Quart, as the Wines generally ſold in Taverns.

SECONDLY, For that this *Cyder-Royal* being as good as Wine at 18 *d. per* Quart, the Price cannot fail of 8 *d. per* Quart, until by a very conſiderable Encreaſe of Plantations, the Thing be made cheaper thro' the greatneſs of the Quantity.

HAVING thus ſpoken of the Improvement that may be made of Land by Fruit-Trees, I might alſo here treat of its Improvement by Planting of *Madder*, *Woad*, *Safflower*, and other Stuffs for *Dying*; but this being already done in *Suffolk*, and ſome other Counties in *England*; and being alſo done with more Difficulty, I ſhall let it alone.

BUT as the Sowing *Hemp*, *Flax*, &c. is a very great Advantage, and the Encreaſe thereof very Large, I muſt recommend 'em to my Countrymen, who may ſoon reap unexpected Benefit thereby.

THERE is no Ground ſo barren but what may produce ſome Grain or other, if due Care be taken, and a right Management; and the Expences which are required for carrying on the Work will be very inconſiderable, if we conſider the Profits which will ariſe from thence. I have known ſome Ground ſo very Barren, that if you p ow'd it up, you ſhould not have a Blade of Graſs on it for Five or Six Years, ſufficient to Graze a Sheep; and yet that very ſame Land has produced good *Rye* and *Oats*, when managed, as I ſhall now direct.

WHEN you Plow the Earth take care that it be down very light, and then Plow it a-croſs, that by that means you may cut the Surface into ſmall Peices about a Foot Square. Having done this, place ſome Sticks, Bruſh-wood, or other combuſtible Matter on the Ground, and cover them with the Sods of the Earth, till they amount in bigneſs to ſmall Hay-cocks, then ſet Fire to the Sticks, which will conſume the Sods to Aſhes, which ſpread abroad upon the Ground, and immediately run your Plow lightly over it, then ſow your Grain (even while the Aſhes are warm, if poſſible,) and *Harrow* it inſtantly. You need not fear of a good Crop.

NOW as there are many Farmers who burn Turf all the Year round, and keep the Aſhes for Manuring their Land, I muſt give them the following Advice, to which they are Strangers. There are very few who purſue this Method of keeping their Aſhes, but throw 'em either before their Doors or ſome other places, whereby they are expoſed to the Sun and all ſort of Weather; not conſidering how much thoſe Aſhes loſe of their

their Virtue, by being thus expoſed. Therefore to avoid that Inconvenience, it would be very Neceſſary to build a little Houſe or Hovel ſufficient to contain ſuch a Quantity as they may have to put into it, ſo walled and covered at Top as to preſerve the Turf-Aſhes from the Sun, Rain, and Wind; and if they daily caſt their Urine or Piſs upon the Aſhes, it will greatly add to their Virtue, and a Buſhel of them thus preſerved ſhall be of more Benefit in warming and fat'ning the Land, than Two Buſhels which have been expoſed to the Air. And indeed the Reaſon is very plain; for the Sun exhales the Salt of the Aſhes, in which their Virtue does conſiſt, and the Rain deſtroys and flattens it; but if you keep them cloſe you, avoid thoſe Inconveniencies, and by caſting Urine upon them, you add more Salt to them, and conſequently make them more fit to Nouriſh your Land.

I muſt recommend another Piece of Husbandry, which is little regarded, *viz.* to plant Two or Three Rows of *Black-Thorn* on their Ditches, each Row at the diſtance of Twelve Inches from each other. This is not only more beautiful to the Eye, but alſo more profitable to the Farmer than making a Fence with *Stakes* or *Wattles*; for Boys or Sport men are very ſubject to pull up the *Stakes*, when they have a mind to avoid going round by the common Road, or to enter at the Gate, which may be diſtant from them, and ſo tread down your *Graſs* or *young Corn*; which a *Quick-ſet Hedge* will prevent, becauſe their Roots take a faſt Hold, and the Thorns are a Safe-guard to them.

CHAP. II.

Shewing how to make Cyder, Perry, Juice, Wines, or Liquors of Apples, Pears, Wildings, Crabs, Cherries, Currans, Gooſe-Berries and Mul Berries, as ſtrong, wholſome, and uſeful, as French, Spaniſh, *and other Wines now in frequent Uſe; and yet the ſaid Cyder, ſo improved, to be made and afforded for* 3 d. per *Quart, tho' as good as the Wine now uſually ſold for Eighteen-pence the Quart.*

I. TO make *Cyder-Royal*, or raiſe ordinary Cyder to be full as good, or better than *French* Wine; or to make the beſt *Simple Cyder* twice as ſtrong as it is, (and ſo the like of any of the aforeſaid Liquors) is by putting the Strength and Goodneſs of two Hogſheads into one; which is thus effected:

FIRST,

FIRST, Put one Hogſhead of *Cyder*, and ſome part of the other, into a *Copper-Still*, and draw off all the *Spirit*; after which Diſtil the ſaid *Spirit* a ſecond time, and then put the ſame into your other Hogſhead, and fill it up, ſtir it about well and keep it cloſe ſtop'd, except one Day in ten or twenty let it lye open five or ſix Hours. And within one quarter of a Year, if the enſuing Direction be obſeived, this *Cyder* will be full as ſtrong or ſtronger than the beſt *French-Wine*, and and altogether as pleaſing, tho' it may be ſomewhat different to Taſte.

II. But if you would have it drink more like *Canary* or other *Sacks*, you muſt add more of the *Spirit*, and as much *Sugar* or *Sweets* (the making of which is herein after taught) as will beſt pleaſe your Palate. And as the proportion of one Pint of good *Spirit* to a Gallon, will make it as ſtrong as *French-Wine*; ſo one Pint and a half will make it full as ſtrong as *Spaniſh-Wine*: and by this means, in like manner, *Perry* and the Juice of *Cherries*, *Mulberries*, *Currans*, and *Gooſe-berries*, (eſpecially *Gooſe-berries*) may, by adding thereunto their proper *Spirits*, or any other convenient *Spirits*, be made as good and pleaſing as the *Wines* made in the *Canaries*.

I mention other *Spirits*, becauſe upon Trial I have obſerved, That *Brandy*, *Spirit* of *Wine*, and of *Grain*, and other *Spirits* may be of good Effect in this Buſineſs, provided they are drawn Fine; yet, by Experience, I have found the *Spirits* of the ſame kind, or at leaſt of ſome other Fruits, to be the beſt and moſt Natural; and the *Spirits* raiſed from *Ale* or *Beer* to be moſt improper.

proper, unleſs the *Ale* and *Beer* be mix'd with *Cyder* before the *Spirits* be drawn off.

III. Now this Method of Improving *Cyder*, and other Liquors, renders them more ſtrong and delicious, and alſo makes them much more wholeſome for the Body than *Simple Cyder*; the Heavy, Cold and Sickly parts being either wholly taken away, or ſo corrected, that it becomes no way prejudicial to the Stomach, nor any longer apt to generate Wind. And I think none will deny that the Juice of *Vegetables* growing in our own Soil, and under the ſame Influences with our ſelves, being thus Honeſtly improved with their own *Spirits* only, or the Addition of a little Innocent *Sugar*, are as agreeable to our Bodies, and muſt needs be as good and wholſome as thoſe that are brought from Regions remote and Climates vaſtly different, and afterwards Brewed again with variety of unknown, and perhaps dangerous Ingredients. And much more is the former to be prefer'd than the latter, in another reſpect, *viz.* Becauſe if ten times more of it be ſpent than there is of Foreign *Wines*, the Nation will be never the Poorer for it, but on the contrary much the Richer.

IV. For there is in this Invention not only *Strength* to chear the Heart of the Weak and Weary'd; *Delicacy* to pleaſe the Palate of the Curious; *Cheapneſs* to render it familiar to the Poor; *Private Profit* to gratify the Rich, and *Wholeſomeneſs* to Indear it to due Obſervers of their Health, but alſo *Publick Advantage* to recommend it to the regard of the *King* and *Parliament*. For by this Expedient, *England*, and the Territories thereunto belonging, may ſave at leaſt Six, if not Eight Hundred Thouſand Pounds

Pounds Sterling *per Annum*, by ſaving ſo much Treaſure as goes out every Year to the Enriching of other Nations, and Impoveriſhing of our own.

To this there may be ſome Objections.

FIRST, Thoſe whoſe Lands are improved in raiſing of *Barley*, will fear that by this Expedient *Rich Liquors* will be ſo Plenty and Cheap, and raiſed by every Body for their own uſe, That *Beer* and *Ale* will be neglected; and conſequently they will, in ſome meaſure, loſe their former Benefit ariſing by *Barley*.

TO this I Anſwer; *Firſt*, 'Tis as reaſonable That all others ſhould make the beſt improvement of their Lands, in an honeſt way, for their own and the Nations Good, as that theſe Men ſhould make the moſt of theirs for their private Intereſt. *Secondly*, Moſt Lands, kind for *Barley*, are proper for ſuch Plantations; and the Owners thereof, as well as others, may make the like Profit in this way, and much more than they did by *Barley*: For that one Acre of Land ſo Planted, as is before mentioned, when grown up will (without charge of Plowing and Sowing) produce more Hogſheads of *Cyder*, and *Wine-Royal*, worth Six-pence a Quart, (or Three-pence at leaſt) than it would ſtrong *Beer* or *Ale*, worth but twopence *per* Quart if it had been ſown with *Barly*. *Thirdly*, As for ſeveral Years yet to come there will be little danger of the Objected Inconveniencies, *viz.* Until thoſe Trees, hereafter to be Planted, ſhall be grown up ſo in the mean time until then, there will be more *Beer* and *Ale* ſpent than was before was diſcover'd, becauſe Cyder, which was Sold for

twenty

twenty or thirty Shillings *per* Hogſhead, and ſpent inſtead of Beer, will now be advanced to the Price of Five or Six, perhaps Eight or Ten Pound *per* Hogſhead, and ſo be drank inſtead of Wine. And Laſtly, When the Plantations ſhall be grown numerous, the Publick Wiſdom of the Nation may eaſily prevent any ſuch Inconvenience as is feared, by laying ſuch an Impoſition on all home-made Wines and Cyders, as may keep them from being ſold too Cheap, which yet will be no Burthen to the Planters, nor have they any reaſon to complain thereof, tho' it ſhould be twenty Shillings on every Hogſhead; ſo great will their Profit be notwithſtanding.

THE Second Objection is conſiderable, *viz.* That this Invention of Improving Cyders, and other Liquors of our own Production, hindering the Conſumption and Importation of Foreign Wines, will much diminiſh his Majeſty's Cuſtoms.

TO this is humbly Anſwer'd, That the Loſs' of Cuſtoms by decreaſe of Foreign Wines, may be eaſily made good; nay, the Profit to the King more than doubled, by an Impoſition on theſe Home-Liquors which come in place of them. And as the Publick National Intereſt will readily embrace and afford ſuch an Impoſition, which tends to the ſtopping of the vaſt Sluce of Treaſure, which Foreigners Yearly drain from us: ſo may the ſame be laid without any Grievance to the particular Subjects that are to pay it; ſince notwithſtanding the ſame, 'tis evident every Acre may be made worth at leaſt, ſix Pound *per Annum* (after all Charges deducted) better to the Owners than it was before: And every one for his own Uſe may make, or have that for

Three-

Three-pence at moſt, as good as what he paid a Shilling for before, beſides the publick Profit of enriching the Nation ſeveral Hundred Thouſand Pounds every Year.

FOR Example, (keeping to our firſt and the meaneſt Calculation that can in reaſon be imagined) Suppoſe but four Hogſheads of Cyder-Royal, and as many Curran and Gooſe-Berry-Royal be made upon an Acre; theſe at Three-pence *per* Quart make the Product of that one Acre for that Year twenty four Pound. Now ſuppoſe further, That an Impoſition were laid of one Penny *per* Quart, which is twenty Shillings *per* Hogſhead, then the King's Part, or Profit from that Acre, will be eight Pounds *per Annum*, and the Planter's ſixteen Pound; and ſure the latter has no Cauſe to complain, ſince that may be more than two Crops of Grain would have brought in.

AND at this Proportion, where there ſhall be one Hundred Thouſand Acres planted, the King may raiſe ſix or eight Hundred Thouſand Pounds *per Annum*; and yet, at the ſame time, much benefit and enrich his Subjects, and keep his Treaſure at Home from being exhauſted by Foreign Nations, enjoying for 3 *d. per* Quart, altogether as good, or better Drink, than that for which before they paid 18 *d.* And as for thoſe that Plant it, eſpecially ſuch as have Land of their own, they may by this means always keep their Houſes plentifully furniſh'd with variety of rich delicate Liquors for the chearful Entertainment of themſelves and their Friends; and if there be no Impoſition, the ſame will coſt them nothing but the Labour of making it: And if there be ſuch an Impoſition, (yet beſides their Labour)

Labour) it will ſtand them in but one Penny a Quart.

AGAIN, The Decreaſe of Cuſtoms on Foreign *Wine* may be ſupply'd by laying double or treble Cuſtoms on what ſhall for the future be brought in; for ſince there will be no need of it, 'tis but juſt that thoſe that will gratifie their Fancies to the Publick Prejudice of their Country, ſhould pay for their Humour, which, perhaps, will make their Out-Landiſh Drinks Reliſh the ſweeter; and yet they will have no Reaſon to grudge it, ſince (ſuppoſing them Perſons of Eſtates) their Lands by this Improvement of *Cyder* at Home, will be much Augmented in value.

IF it be Objected, That the Cuſtoms already on *Wine*, are twice as much *per* Hogſhead as what is propoſed to be laid on *Cyder*. —— I Anſwer, --- Suppoſe the Cuſtoms on *Wines* be 8*l*. *per* Tun, and on *Cyder* but 4*l*. yet ſince *Cyder* may be made for 3*d*. *per* Quart, as good as *French Wine* at 18*d*. *per* Quart, it may be concluded, that there will be four times as much *Cyder* Drank, as there is now *Wine*; which if ſo then for every 100*l*. the *King* receives for *Wines*, he may receive 200*l*. by *Cyder-Royal*.

THERE is yet another Objection, Many People are much againſt Mixtures in Drink; and will be ready to ſay, *Here is a Mixture in your Cyder-Royal, and therefore we will not like it.* —— To which I will Anſwer: *Firſt*, 'Tis not Mixtures, but Dangerous or Improper Mixtures, which ought to be avoided. *Secondly*, This in Truth, is not any Mixture at all, ſince only the better part of the ſame thing or kind is added

to

to it; and when all is done, it is but *Cyder*, or *Wine* Refined and made better, without any *Compoſition*, but what comes from the *Apple*; unleſs you will (which is left to your own free Choice) to gratifie your own Palate, add a little *Sugar* which all Men know to be wholeſome and nouriſhing, eſpecially when 'tis firſt ſo purg'd and ordered as herein after is ſet forth; nor is ſuch *Spirits* in ſuch Liquors any ways worſe than *Gravy* with *Meat*, which makes the beſt Sauce for the *Fleſh* whence it proceeds: And as the *Gravy* is the Vital and Nouriſhing part of *Meat*, ſo is the *Spirit* of *Cyder* to *Cyder*. But if our *Cyder-Royal* muſt be refuſed as being mix'd, I deſire to be inform'd what Liquor (except fair Water) there is in Common uſe, not much more juſtly liable to the like Exception?

BUT perhaps our greateſt *Wine-Bibbers* will by no means, change their Outlandiſh *Liquors* for Domeſtick *Cyder*. *Becauſe*, ſay they, *the Quantity we are to Drink will make us* ſick *before it will make us* Merry, *&c* To which I anſwer, This is undoubtedly true of our common *Simple Cyder*; but if you pleaſe to conſider the Cauſe, you ſhall find no room for this Exception againſt our *Cyder-Royal*: For that which uſeth to cauſe this ſickneſs in the Stomach, is the Chilly, Cold, Flegmatick part of the *Cyder*, viz. That which hath leaſt *Spirit* in it is moſt hurtful: That this is ſo, nothing can be more Evident; for that the ſtrongeſt *Cyder* is moſt free from occaſioning this Diſtemper. Now this we know, that the *Spirit* of *Cyder* is no other but the purer part of it, *viz.* The ſtrong, warm and lively part, ſeparated from the

the weak, cold, and melancholly dead Part; ſo that Reaſon muſt needs yield, that the Spirits of the Cyder being mixt with Cyder, cannot but make it both more ſtrong and pleaſant, and alſo more wholſome, for that, by this Expedient, the ſickly, cold, and windy Part is cured.

MOREOVER, for want of Strength and Life, common Cyders are apt to decay and dye; this we ſee by Experience; for that as the ſtrongeſt ſimple Cyder hath moſt Spirit in it, and therefore lives longeſt, ſo the weakeſt Cyder that hath leaſt Spirit in it, will ſoon grow ſickly and decay; therefore this Expedient muſt needs be ſo far from rendring Cyder more unwholeſome and unkind, that 'tis rather to be eſteemed its moſt infallible Phyſician or Remedy; for that it corrects all the ill Humours that cauſe its Sickneſs, or ill Effects on humane Bodies.

AND thus much I can honeſtly and truly aver from long Experience, That a Glaſs of this refined Cyder-Royal, drank half an Hour before Meals, procures a good Appetite; and afterwards helps Digeſtion, chears the Heart, and revives the Spirits. And as for its Operation upon the Brain, when too much is drank at a time, the ſame is leſs hurtful than Exceſs of ſtrong Beer, Ale, Canary, or Mountain-Wines: For 'tis ſo far from clogging the Stomach, or clouding the Brain with thick muddy Vapours, that I do believe a Man may (were it not a Sin) be Fuddled and Sober twice in a Day with this Liquor, without miſchief to his Health; and the Reaſon, in my Opinion, is becauſe it ſo admirably provokes Urine, and carries off with it ſuch foul and nauſeating Matter that too often offends the Head, Stomach, and Belly; the Truth of all which,

which, I doubt not, will be ſoon atteſted by the Experience of thoſe that ſhall make Tryal.

V. A Buſhel of *Currants*, ripe and good, will make 6 or 7 Gallons of *Wine*; to every Buſhel of *Currans*, ſo ſoon as they are broken to pieces, put in 12 Quarts of Water, and in 12 or 16 hours after, Preſs it and Strain it, put it into a Cask, and let it ſtand until it begin to be clear, ſo pour it off from the *Groſs-Lee*, and put to each Gallon a Pint of good Spirit, and as much as beſt pleaſeth your Palate, of *Sugar* or *Sweets*, (hereafter mentioned) ſtir it well together for one quarter of an hour, then ſtop it up cloſe for about a quarter of a Year.

IN like manner is made *Wine-Royal* of *Gooſeberries*, *Mulberries* and *Cherries*; but of all theſe, that of *Gooſe berries* excels the reſt, and doth reſemble *Canary* the moſt.

IF it be Objected, That the foregoing Calculations are Partial, becauſe I have not caſt up the Charge of converting the Fruit into *Cyder*, nor the Charge of *Sweets* or *Sugars*.---To this it is Anſwered, That there is enough to be ſaved to defray all ſuch Charges, *viz.* by ſaving the *Spirits* that may be drawn out of the *Apples* after the *Cyder* is Preſſed out of them, as is herein after-mentioned; but that which is much more Conſiderable is, That here may be made double the quantity of *Gooſe-berry* and *Curran Wine-Royal* as has been reckon'd upon in the 4th and 5th Paragraphs, in this Reſpect, *viz.* becauſe I there allow 20 Buſhels of *Currants* and *Gooſeberries* to an Hogſhead, whereas every buſhel will make 6 Gallons, ſo that 20 buſhels will make 120 Gallons, which is two Hogſheads, ſo that there

there may be at leaſt four Hogſheads on an Acre more than was reckon'd, which may much more than pay for all the Charges of Sweets, and of converting the Fruit.

VI. When Cyder comes to be plenty, there may be as much good Brandy made thereof, as may furniſh the Nation, both for Land and Sea Service; which, perhaps, may ſave us ſeveral Hundred Thouſand Pounds *per Annum*; for which Uſe the moſt ſtale and ſowre Cyder, unfit almoſt to be drank, will make the greateſt Quantity, and beſt taſted Brandy, being twice Diſtill'd. Of this Cyder-Brandy I have kept ſome four Years, and better than it was at firſt making, and without doubt would keep four Years longer.

VII. The beſt known Fruit that is only for Cyder, is *Red Streak*, which is a kind of *Wilding*; but for both Uſes, *viz.* for the Table and Cyder, the beſt are Golden Pippins, becauſe they are both quick Growers, great Bearers, yield the greateſt Quantity of Liquors, and the beſt in Quality; and their very Husks, after the Cyder is preſſed out, eſpecially the *Golden Pippin*, will yield more Spirit than any other I have yet found out: Nor is it harder to raiſe the Beſt Sort of Fruit than the Worſe:

Some other *Wildings* I have found that are as good as thoſe, but they are, as yet, unknown by Name; but this is moſt certain, good *Wildings* and good *Crabs*, are better for Cyder than the moſt delicious Summer or Winter Table-Fruit, or Sweet Apples; (*Golden Pippins* excepted) yea, the bitter ſharp *Crab* is much better than a bitter ſweet Apple, becauſe the Juice of the firſt will

will afford twice as much Spirit as the latter: And no Spirits can be more pleaſant, ſince the ill Taſtes (if any) are left behind in the Flegmatick Part of the Cyder. For Example, Suppoſe you put 10 *l.* of Sugar into your Still, amongſt ten Gallons of ſowre Cyder, the Spirit will be never the ſweeter: Or ſuppoſe you fill your *Still* with new ſweet *Mead*, made of *Honey*, *Sugar*, or *Moloſſo's*, you ſhall have neither *Spirits*, nor *Sweets* come out of it, but only fair Water; but if you let it ſtand till it be well fermented, and become ſowre, it will yield Spirit in abundance; ſo likewiſe Cyder, Perry, or Juice of Crabs, *Gooſe-beries*, *Currans*, *Mulberries* and *Cherries*, will yield little or no *Spirit* until it be paſſed the *Fermentation*, (or *Working*) and then the more ſower it is provided it be not *Vinegar*) the more *Spirit* it will afford: Nevertheleſs, this obſerve, *Apples* of bitter taſte make the *Cyder* bitter.

VIII. As to the time of putting your *Spirits* into your *Cyder*, obſerve, that the Staler your *Cyder* is before the *Spirits* are added, the more time they require to encorporate; and the ſooner they are put in, the ſooner it is fit for uſe. But in caſe you put your *Spirits* into *Cyder*, before it hath fermented, they will Evaporate, and be caſt out; therefore be ſure that your *Cyder*, be Rack'd off the Lee, once, twice or three times as you find occaſion, and being indifferent fine, then put in your *Spirits*, either with or without *Sweets*, well beaten together with a certain Quantity of *Cyder*; and after 'tis put into the Caſk, ſtir it very well together again, and bung it cloſe up, and about two or three Months after, it will become very agreeable and fit for uſe; Obſerve, the longer it lieth the better, eſpecially

pecially if your *Cyder* be Stale e'er your *Spirits* are put in; for as this *Cyder* drinks very unpleasing when first mix'd together, so no *Wine* can be more strong and pleasing than this, when it hath stood its due time to Incorporate and Meliorate, and the mean time to be kept close stop'd without drawing any out; unless the Season of the Year be warm, then to prevent its fermentation, let the Cask be open as you find occasion.

IX. The first and worst Infirmities that common *Cyder* is subject to, are of two sorts, either being musty, or fretting it self, until the *Spirits* are spent, and the *Cyder* become Weak and Unpleasant.

IF *Apples* be gathered into the House whilst they are wet, they will be musty, and so will the *Cyder*; again, if the Vessel, wherein 'tis made, or that you put it into be musty, so will be your *Cyder*: If none of these happen you nead not fear any thing of that kind: But if *Cyder* be musty, so will be the *Spirits* that are drawn from it.

TO Cure *Cyder* that is subject to fret is somewhat difficult; but the best way is to prevent the Causes, which are either the Gathering of the Fruit before they are Ripe, or making the *Cyder* before the *Apples* have lain long enough; for until *Apples* have lain in a Heap while they have sweat, and are dry again, they cannot be fit for the Press. But if, by reason of warmth and mildness of the Season, or any other Accident, the *Cyder* should fret and destroy it self, the best way is to draw it off into another Vessel; and do so once in six or ten days as you see occasion, always taking the *Lee* from it as oft as 'tis Rack'd. Let not your Vessel be full by a Gallon,

nor

nor yet ſtop'd cloſe, until, by drawing it off it be made to leave huzzing and ſputtering; for the fuller and cloſer it is, the more it frets. When your *Cyder* is thus quiet, then have a care to keep the Veſſell full and cloſe ſtop'd: Yet leſt you ſhould ſtop it too ſoon, open it once in two, three or four days, and if you find it is not yet quiet, let the Veſſel lie open an hour, or half an hour at a time.

OMIT not to burn a Match of *Brimſtone*, dip'd in *Coriander-Seed* in your empty Cask, juſt before you put in your *Cyder*, and this as oft as your *Cyder* is Rack'd; 'tis an excellent Expedient to prevent ill Taſtes and Fermentation.

X. The beſt way to Order your *Sugar* before you put it into your *Cyder*, is to make it into a kind of *Syrup* or *Sweets*, by diſſolving of it in *Water*: A Hundred weight will make 16 Gallons, and ſo proportionably. But before you put your *Sugar* into the Kettle, take the Whites of 30 or 40 *Eggs*, the more the better, which being well beat, with a thing like a Rod or Whisk, in eight or ten Gallons of *Water*, then put four Gallons of this *Egg-Water*, ſo prepar'd, into your Kettle where your *Sugar* is to be diſſolved; then hang it over a gentle Fire, and ſtir it about until it be diſſolved; but be ſure when it Boils, put in more *Egg-Water* to keep it from boiling too high; and ſo to continue putting it in, one Quart after another, until all your *Egg-Water* be ſpent; but to prepare your *Egg-Water* in parcels, *viz.* a Quart or two at a time, as you uſe it, is the better way. Now the uſe of theſe *Eggs* is only to raiſe ſuch a Scum as will carry away, not only the foulneſs and groſſneſs of the *Sugar*, but all the *Egg* alſo.

And

AND when the Scum hath done riſing, and is clean taken off, then fill up your Kettle with as much *Water* as will make up your quantity and let it Boil to the ſize of a *Syrup*, and being cold, put it into your *Cyder* ; but to put in a little *Coriander-Seed* bruiſed and tied up in a fine Linnen Rag whilſt it's Boiling, will give it a fine Grateful Scent.

OF theſe *Sweets* you may put in two or three Gallons more or leſs into an Hogſhead, as your Palate invites you, or the Tartneſs of the *Cyder* requires: but put them not in till you have Rack'd your *Cyder* the laſt time, and it be paſt the Fermentation. And before you put your *Sweets* into the Cask, mix your *Sweets*, and the *Spirits* you intend to put in together, with a like quantity of *Cyder*, and ſtir them well together, then put all into your Cask of *Cyder* and ſtir 'em with all your Strength, with a ſtrong Staff in the bunghole for one half quarter of an Hour, after that ſtop it cloſe, and draw none off till two, or three, or four Months; by which time it will be anſwerable to what hath been propoſed ; only remember that if you will have it to reſemble *Canary*, you muſt add the greater proportion of *Spirits* and *Sweets* ; but if *French-Wine*, then the leſs *Sweets*, or none at all.

AS to the ſort of *Sugar*, if the *Sweets* be made with White, the *Cyder* will remain Pale ; if of brown *Sugar*, it will raiſe it to an higher Colour, and in my Opinion the latter is as good, as well as the cheapeſt, ſince the Courſeſt, by the aforeſaid Preparation, becomes as pure as the Fineſt. And *Sweets* being thus made will coſt but 5*d*. *per* Quart.

AND

AND thus every Man may merrily make his Varieties of Drink, with that which he knows to be good, cheap, and wholesome, which is more than he is sure to have at every Tavern, altho' he pays three times as much for it; nor hath he so much reason to suspect these Liquors in those Houses to be so much Adulterated as the others, because none of like Goodness to the Eye, Scent, and Palate, can be afforded so cheap to the Pocket.

XI. The Husky Part of the Apples, after the Cyder is pressed out, being steeped two or three Days in as much Water as will cover it, and then pressed clean out, and kept in a Vessel until it hath well Fermented; as also the Lees of all your Cyder will afford Spirit or Brandy so much, that being added to the Cyder of the same Apples, will make it as strong as *French* Wine, which is a Thing of great Advantage.

XII. Spirits being put into Bottles amongst Cyder, or any of the aforesaid Liquors, will not drink well. I was a long time troubled to find out how to make this Drink as Pallatable and Pleasing, as it was become Strong and Chearing, until I put both Cyder and Spirits into wooden Casks; the first I compleated was in a Vessel of six Gallons, into which I put two Quarts of the Sweets, and three Quarts of the Spirits of Cyder, which after it had lain two or three Months, I found to be as strong and pleasing as *Canary*.

XIII. By adding *Wormwood* to Cyder-Royal, as you do to Wine, you may make it as good and grateful to the Stomach, both for procuring Appetite, and causing Digestion, as the best

Purl-Royal, or Wormwood Wine. Thus you may have of your own Growth, *Cyder-Royal*, *Gooſe Berry*, *Curran*, *Cherry*, &c. from the Size of the ſmalleſt Wines, to the ſtrength and goodneſs of the beſt *Canary*, ſuitable to all Seaſons of the Year, and to the Conſtitutions of all Perſons, and Humours of all Palates, and agreeable to all Ages from Children of 12 Months Old, to the height of Old Age.

XIV. This Cyder-Royal, or New Wine, thus prepared, may be kept in the Cask two or three Years, and be better thereby, provided you keep the Cask full; to do which, you muſt obſerve, that in two Months time, the Liquor will waſte a Quart more or leſs, as the Veſſel is bigger or leſs; which you ought to fill up again, with Liquor of the ſame Strength, or if ſtronger the better. And by this means it may be kept, and grow better and better, ſome Years, without putting into it (as ſome are ſaid to do into their Liquors) *Stum*, or other unwholeſome Ingredients.

SUPPOSE, by keeping *Cyder-Royal* too long, it ſhould become unpleaſant, and as unfit to Bottle, as Old *Hockamore*, take but one Hogſhead of That, and one of tart *New Cyder*, and before the latter be quite clear or fine, mix them together in two other Hogſheads, well perfum'd, and add of *Spirits* and *Sweets* a due Proportion to the Quantity of your *New Cyder*.

SUPPOSE it be in the Month of *October*, or *November*, you may be ſure to have it full as good, if not better, than ever it was, and a moſt excellent *Cyder-Royal* to drink, or to Bottle, by or before *Chriſtmas*

THIS

THIS is a certain Maxim, as well as the foregoing, nor can your *New Cyder* be made half so good by that time of the Year.

TO conclude this Chapter: No industrious thrifty Gentleman, Farmer, *&c.* who hath Lands to improve, and will observe the foregoing Directions, but what shall find not only great increase in his Estate thereby, but a large Magazine of Pleasure and Delight.

CHAP. III.

The beſt and quickeſt Way of raiſing a Nurſery, &c.

THE raiſing of Nurſeries for *Orchards* being ſo Eſſential towards the Produce of *Cyder*; and ſince, by Experience, I know that theſe following Difficulties and Inconveniences do happen therein, *viz.* That two Trees of one ſort of Fruit, and both well Rooted alike, and Planted in one and the ſame Soil, many times the one will grow bravely, and bear a Buſhel at a time, within ſix or ſeven Years, and the Fruit good and pleaſant, when the other ſhall be a ſmall Shrub, and produce ſmall unpleaſant Fruit, and not half a Peck for the other's Buſhel.

AGAIN, Some Trees, tho they are Planted on very good Land, and Husbanded never ſo carefully, will yet never become good nor long-liv'd Trees; whereas other Trees, planted in the ſame Land, ſhall grow apace, be very Fruitful and long-liv'd. The want of knowing the Cauſes and Remedy of theſe Things, hath not only diſcouraged many from Planting, but hath ſpoiled many hopeful Trees and Orchards.

AS

AS for the Remedy, it is (in it self) both plain and easie; and therefore, since many People think that they need not be taught any thing that is so, and are unwilling to acknowledge any Obligation to those that inform them thereof, what need I say any more? Let them find it out.

HOWEVER, for the Satisfaction of Persons more Modest and Grateful, I will at present shew you the best Expedients to prevent both those mischiefs, which are the great cause why, in most *Orchards*, little more than half of the Trees prove good.

AS to the *First*, Supposing two young Trees being both very good, let one of them be set shallow, *viz.* The upper Root not more than an Inch or two at the most under Ground, and the deepest not above 8 or 9, and suffer no downright Root to be upon it; then shall you have it a thriving Tree, and bear good Fruit, if it be carefully preserved, and kept clear from Suckers and Superfluous Branches, which are apt to Sprout up at, or near the Root. But the other Tree being set too deep, never Thrives nor proves Fruitful.

AS to the Second Inconvenience, by which the Planter misseth his Expectation, that doth arise from the *Stock* or *Kernel*, on which the Graft is placed: And this I take for a certain Rule, that the *Kernels*, of Fruit produced by a Shrub or unthriving Tree, very rarely prove good, and, indeed, the like may be said of *Apple-Kernels* in General.

WHEREFORE, in raiſing of Nurſeries, rather take your *Kernels* from a Fruitful Crab-Tree, that hath a clear Body, a great ſpreading Head, and full of Boughs and Branches; for it may be obſerv'd, that as the Head is full of Boughs and Twigs, ſo proportionably that *Stem* abounds with *Roots* and *Fibres*; and as the Tree, ſo will its Product or Seed be. I have ſo much remark'd this, that I would much rather give 12*d.* *per Tree* for thoſe ſo raiſed, than 1*d.* a *Tree* for ſuch as are raiſed from *Shrubs* or *Apple-Trees*.

FROM ſuch *Kernels* as aforementioned, I do know *Trees* may be raiſed ready to be Tranſplanted into *Orchards*, and produce a Buſhel on a *Tree* within 10 or 12 Years after the *Kernel* is put into the Ground; for the doing of which, and to raiſe a Nurſery to the beſt Advantage, I will ſhew you the beſt Expedients my ſelf have Experienc'd in the following particulars.

I. As to the ordering of your *Kernels* of ſuch *Crabs* as aforeſaid, either put them in the Ground ſo ſoon as they may be taken out of the *Crab*, or elſe as ſoon as the *Winter* will give leave, the ſooner the better; but if you keep them till the *Spring*, take care they be kept neither too moiſt nor too dry; if too moiſt, they will heat, &c. if too dry, they will not grow, therefore keep them in a mixture of dry Sand within Doors.

II. So ſoon after *January*, as the Seaſon will permit, ſow your *Kernels* in ordinary good Ground (that lies as warm and free from the Wind as may be) let the Ground be well dig'd, and the *Kernels* be Rak'd in, ſo as they lye not too deep; an Inch, as near as you can gueſs, is enough when

when they are come up, preſerve them clear of Graſs and Weeds, till you have them Tranſplanted.

III. The next Spring, *viz.* about twelve Months after your Kernels were ſown, you may draw thoſe, that are beſt grown, and Tranſplant them into a Nurſery.

IV. Let your Nurſery Ground be made good with Dung, and well dig'd, and mix'd together, and ſet them in Rows ſo far apart, as that you may dig between, *viz.* The Rows at two Foot diſtance; but, in in the Rows, the Plants may be placed within 9 Inches of each other.

V. Before you ſet your Plants in the Nurſery, be ure crop off the down-right Root, ſpread the ſmall Roots, and cloſe up the Ground very well about them.

VI. The next Spring after this, you may return again to your firſt Plantation of *Kernels*, and draw forth, and Tranſplant into your Nurſery as aforeſaid, as many more as have made a good Shoot, ordering them as the firſt, and ſo you may do from Year to Year: But obſerve, the laſt of all are not ſo good as the firſt, altho', for the ſecond or third Year they may do well enough.

VII. Having thus Tranſplanted your *Kernels* into a Nurſery, they ought ſtill to be kept clean from Weeds, and alſo the Grounds to be kept looſe, that the Roots may ſpread the better; and therefore, in the next *Autumn*, before the *Leaf* is off, your Nurſery ought to be digg'd, but never amongſt them but once a Year; only

pull up the Weeds in Spring and Summer, as often as Occaſion requires.

THE difference betweendigging your Nurſery and other Trees, whilſt the Leaf is yet on, and afterwards, is greater than you may at firſt imagine; for that if it be done whilſt the Sap is up, if a *Root* ſhould happen to be cut, the ſame will ſhoot out again, perhaps Two for One: But after the Sap is once down, if a Root be cut, it will not ſhoot forth that *Winter*; nevertheleſs, be not too early in the Seaſon, nor yet too careleſs of the Roots.

VIII. By that time your *Plants* have had one or two *Summers* Growth in your Nurſery, the next *Winter*, or rather near the *Spring*, cut off all their Tops, about a Foot above the Ground, and the next *March* or *April* after, the biggeſt of them will be ready to be Grafted.

IX. A Tree that is Grafted, having made two *Summers* Shoot, is fit to be Tranſplanted into an *Orchard*, becauſe there's far leſs danger of a Young Tree's not growing or thriving, than is of an Old.

X. In Tranſplanting beſure ſet not too deep; to prevent which, this I do: *Firſt*, Dig my Hole four Foot Square, but no deeper than one Spit, or thereabouts, *viz.* no deeper than the *Roots* of the *Trees* ſhould lye; for if the Holes be dig'd deep, and fill'd up again before the Tree is planted, the Tree and all will ſink together, and never Proſper.

IF it be objected, That if the Holes be no deeper, they will not contain the *Roots* of many

ny Trees; for ſome have *Roots* as downright and long as *Parſnips*; ſome are ſingle, ſome are double, and ſome treble, and all downright long ones, and ſuch an Hole will not receive them.

I *Anſwer*. Away with ſuch Trees; I would rather give Two-pence a Dozen for them to Burn, than Six-pence a Hundred to Plant; and tho' there is ſcarce one of an Hundred but thus proves bad, if they are never Tranſplanted (eſpecially if they come from *Apple-Kernels*) yet, if from *Crab-Kernels*, and Tranſplanted as before is order'd, there is hardly one of two Hundred will prove ſo improper.

XI. Now as to the Charge of all this: One Man's Labour upon one Acre of Land with *Crab-Kernels*, may, after three or four Years, raiſe ten Thouſand Trees every Year; which, at 3 *d*. a Tree comes to 125 Pounds, which will well pay the Rent of our Land, and the Gardener's Wages; ſo the Charge of Planting your *Orchard* will be very cheap and eaſy; for that an Acre of Land, planted with Sixſcore Trees, as for the Trees, they come but to thirty Shillings, and the Planting about eighteen Pence a Score, which is nine Shillings, ſo that by this Expedient Nurſeries may be raiſed ſo as to afford an Acre of Land to be planted with the beſt ſort of Trees, and of the beſt Fruit, for leſs than forty Shillings an Acre.

XII. After your Trees are Tranſplanted into Orchards, the greateſt care and charge is, to keep them ſafe from being abuſed, either by *Weeds* that may grow about them, *Suckers* that may grow out of them between the *Root*, any ſpreading Boughs, and from all *Cattle*, *Conies*,

and *Hares*. And in caſe they are digged about the Roots, (where you may, if you pleaſe, plant *Turnips*, *Beans*, *Peaſe*, or any other thing that may deſtroy the *Graſs* or *Weeds*) your Trees will thrive much the better, and grow twice as faſt; but in caſe you plant *Currans* and *Gooſe-berries*, amongſt your *Apple-Trees*, you may place four of them in the ſame Hole with the Apple-Tree, (that is, making the Hole about four Foot ſquare, plant your *Apple-Tree* in the middle, and a *Curran*, or *Gooſeberry Tree* at each corner) and keep them from *Weeds*, and all will thrive together.

NOTE, For *Gooſe-berries* and *Currans*, you had need beſtow more *Dung* than *Apple-Trees* require; and alſo obſerve not to mix your Dung and Earth together before the Trees are planted: For if a Tree ſtand in all Dung, it is deſtructive to the Root. Mud, and Soil of Ponds, Ditches, &c. is as good for this purpoſe as any Dung, provided it be Sun-burnt, and dry'd before it be uſed.

XIII. As to the Soil moſt proper for Orchards, I do obſerve that all Land proper for Corn, as *Wheat*, *Barley*, *Rye*, *Beans*, *Peaſe*, &c. are kind for that Uſe. But the moſt improper is extream hot and dry Sands; and on the other ſide, Grounds very wet and cold.

XIV. As for *Currans* and *Gooſe-Berries*, very great may be the Profit that may be raiſed by planting them among your Apple-Trees, becauſe they will thrive there better than elſewhere. But becauſe the Currans love the ſhadieſt Ground moſt, let the Gooſe-Berries be planted in the very midſt of your Ground, between your Rows

of

of Apple-Trees, and in the moſt Sunny Part, which will add much to their growth.

XV. And as for raiſing of Curran, and Gooſe-Berry Trees, it's very eaſy and ſpeedy; as thus: Take either of the ſaid Trees about the end of *February*, or beginning of *March*, lay down every Limb flat with the Ground, cover every Twig with good Earth, and turn out the Tops that they may lye above Ground, and every Twig will both Root and ſhoot forth; ſo that by the next *Winter* you may have of one *Tree* forty or fifty, perhaps a Hundred well Rooted Plants, fit to be ſo Tranſplanted. Take care to keep the uncover'd Stock, which is between the old Root and cover'd Part, that it run not out in Branches; for if it does, the Twigs will be rob'd of their Nouriſhment as ſhould feed them. Alſo, remember to keep them clear of all Graſs and Weeds that may annoy them.

CHAP. IV.

Directions for Brewing the fineſt Malt Liquors, much Better and Cheaper than hitherto known: Shewing what Care is to be taken in the Choice of Water, Malt, *and* Hops; *and in what Proportions they are to be mixed, boyled,* &c. *for making the beſt* March, *or* October *Beer, ſtrong Ale,* &c. *Alſo particular Directions for the right Managing all Brewing Utenſils.*

THEY who are Curious in Malt-Drinks, as it is fit every one ſhou'd be that uſes 'em, (unleſs their Circumſtances be ſuch that they muſt be contented with what they find) generally make out all their firſt Wort alone into Ale or Strong Beer. Ale is the only Word uſed in the *North* of *England* for ſtrong Malt Drink: And was likely the only Strong Drink our Fore-Fathers made of Malt.

INDEED,

INDEED before the uſe of *Hops*, which began in *England* about the Year 1540. as I take it, it was hard to Brew Drink that wou'd be Fine before it was Eager. All good *Ale* is now made with ſome ſmall mixture of *Hops*, tho' not in ſo great quantity as *Strong-Beer* deſign'd for longer keeping: And is for that purpoſe uſually Brewed in *March* or *October*.

HE that will Brew well, muſt be careful in the choice of his *Water*, *Malt*, *Hops*, and in the manner of mixing and fermenting them.

I. As to *Water*; *Pond-Water* and other *Standing Waters* in fat Ground, if clear and ſweet, make a Stronger Drink with leſs *Malt*. than *Well*, *Pump*, or *Conduit Waters*: Tho' any of theſe that are not hungry, and will bear *Sope*, and Lather without breaking, are good. *Rain-Water*, which Lathers the beſt of any if ſaved from Lead, or where it brings no *Salt* from the *Mortar* over which it may paſs, is good to Brew *Ale* to be drank new; but is not proper for Drinks to be long kept, it being very apt to change, and unleſs kept cool and in great Quantities, as in the Leaden *Ciſterns* in Cellars at Amſterdam will corrupt and putrifie the ſooneſt of any *Water*. *Thames-Water*, taken up about *Greenwich* at Low Water, where it is free from all Brackiſhneſs of the Sea, and has in it all the Fat and Sullage from this great City of *London*, makes very ſtrong Drink. It will of it ſelf alone being carried to Sea, ferment wonderfully, and after its due Purgations, and three times ſtinking (after which it continues ſweet) it will be ſo Strong, that ſeveral Sea Commanders have told me it would Burn, and has often Fuddled their

Mari-

Mariners. Other Commanders have deny'd this, which I thought I had reaſon to impute to their want of Obſervation. However, I conceive *Thames-Water* is by no means fit to Brew *Strong Beer* to keep, for that, let the Drink which is Brewed of it be never ſo clear, it is apt on any conſiderable and ſudden change of Weather to ferment and grow foul. And I take this for a Rule, That no *Malt-Drink* is truly good, which is not perfectly fine. Upon the whole, the beſt Liquor to Brew with, is that which is taken from a ſmall clear Rivulet or Brook, undiſturb'd by *Navigation* or *Fording*, and taken up in dry Weather, when no *Rain* has lately waſhed the Banks. My firſt 2 Brewings were made of ſuch *Water*, which, with all my Care and Experience, I cou'd never equal ſince, tho' I have been very Curious, and ſent ſome Miles for my *Water*. Poſſibly much the beſt *Water* in *England* is that at *Caſtleton* in *Derbyſhire*, commonly called, *The Devils Arſe*, &c. Which Owzes from a great Rock, covered over with a ſhallow Earth and ſhort Graſs a top. It is incredible that ſo much Water ſhou'd percolate thro' ſo vaſt a Quantity of one *Rocky Stone*, were it not Obvious to any one who goes into *Pool's-Hole*, where he will find the Water continually dripping thro' the Top, and running down the Sides till it makes a kind of *Chriſtal Rivulet* at the Bottom of that Prodigious *Rocky Concave*. I have ſeen the *Ale* made of *Caſtleton Water* as clear in three days after it was Barrell'd, as the *Spring-Water* it ſelf, and impoſſible to be known by the Eye in a Glaſs from the fineſt *Canary-Wine*. *Brewers* therefore ſhou'd be as nice and Curious in the Choice of Water for their firſt *Wort*, as *Cooks* are for their Boiling of Yellow *Peaſe*. For as ſome Waters will never Boil them

ſoft,

ſoft; ſo will they never make good *Ale* or *Strong Beer*. However if the beſt Water be not to be had, but at too great a diſtance and charge, you may for your ſecond and third *Worts*, which are quickly ſpent, and uſed only for *Table Drink*, make uſe of ſuch Water as you have near at hand.

II. As for your *Malt*; the *North* Country *Malts* from *Nottinghamſhire*, *Derbyſhire*, *Leiceſterſhire*, *Cheſhire*, *Lancaſhire*, &c. are the beſt, eſpecially for *Ale*, but are generally too ſlack dryed for *March* or *October Beer*, which is to be kept at leaſt half a Year before it be drank. The Goodneſs of theſe *Northern Malts* proceeds partly from the *Corn* which grows on Grounds more reſted than in the *Southern Countries*, where the Rents are more racked, and the Grounds more worn by continual Sowing; and partly from the making in which they take more time than in other Parts, and dry it leiſurely with *Pit-Coal*, *Charkt*, called in ſome Places *Coak*, and in others *Culm*, which is ſweet and gives a gentle and certain Heat. Whereas in the *South-Eaſt* parts they dry their *Malt* with *Straw*, which is hard to keep to a moderate and equal Heat. And in the *Weſt Countries* with *Wood*, which gives a moſt ingrateful Taſte to ſuch as are not by Cuſtom familiarized to it; beſides, in the *North* they do not run out their *Barley*, in *Malting*, to ſuch lengths as in other Parts: And in Grinding they ſet their upper *Milſtone* ſo high that it breaks off only the Tops of the *Clevel*, which makes their Drink ſo Fine. And *Malt*, ſmall ground, will never make *Fine Drink*.

THERE is poſſibly ſome Reaſon for the Obſervation, that *Malt* mixt of ſeveral kinds makes the

the *beſt Drink*; And that it ought to lie ground in the *Sacks* three or four days before it is uſed.

III. Your *Hops* muſt be bright, well ſcented, well dryed, cured and bagg'd; and, generally ſpeaking, are beſt about a Year Old. They are a very uncertain Crop, and conſequently of a very uncertain Price, ſometimes at about Half a Crown *per* Pound,; and I believe, it may be truly ſaid, That better *Hops* have been Sold for two Shillings *per* Pound, or upwards. Indeed all *Fruits* are beſt when they are cheapeſt. Thoſe Years that are kindeſt in Quality, always produces the greateſt for the Quantity; ſo that it is certainly a Wiſe way, on all Accounts, to furniſh ones ſelf well with *Hops* well cured in a cheap Year.

IV. In your Mixing and Fermenting all theſe three together, that as in *Brewing*, after you have made a diſcreet Choice of your Materials, you muſt firſt conſider what ſort of Drink you deſign to Brew, and accordingly proportion your Quantities. If you deſign your firſt *Wort* for *Strong Ale*, or *March*, or *October*, *Beer*, you muſt proportion five Gallons of Drink to every Buſhel of *Malt*, that is to ſay, avoiding Fractions, Eleven Buſhels of *Malt* to an Hogſhead of *Ale* or *Beer*. But it muſt be remembered and in ſo great a diſproportion of *Malt-Drink*, as 8 to 5, almoſt a third of your Liquor in the firſt *Wort*, will be abſorpted by the *Malt*, never to be return'd, and an allowance is to be made of about a ſixth part to Evaporate in Boiling ſo that if you expect to clear a Hogſhead of Drink that is 54 Gallons, from your firſt *Wort*, you muſt put into your *Meſh-Tub* near 90 Gallons of Liquor. But for your ſecond or third *Worts*

the Goods being wet before, you need put up no more Liquor than you intend to make Drink, except an allowance of about a tenth part for waſte, that not Boiling ſo long as your firſt *Wort*. And you may of your ſecond *Wort* make one Hogſhead of good *middle-Beer*, or *Ale*, as ſtrong as the common *Ale-Houſe* Drink in *London*. And your third *Wort* will make one Hogſhead of good *Small-Beer*:

I propoſe in this Caſe the drawing off three *Worts*, becauſe of the great Quantity of *Malt* to a ſmaller of Liquor. Otherwiſe, in ordinary Brewings where you deſign not very ſtrong Drink, 6 or 7 Buſhels of Malt will make one Hogſhead of good Strong, and another of Small-Beer. And in ſuch caſe, 2 Moakſes will as well take out the Strength of your *Malt* as 3 in the other.

THE proportion of *Hops* may be half a Pound to an Hogſhead of *Strong-Ale*, one Pound to an Hogſhead of ordinary *Strong-Beer* to be to be ſoon Drank out, and two Pounds to an Hogſhead of *Strong-Ale*, one Pound to an Hogſhead of *March* or *October-Beer*: And for the after Worts, which are not to be kept long, what comes from the firſt *Wort* ſerve well enough to Boil again with them,

IF you put into your firſt *Wort* a greater proportion of *Hops*, and boil them all the while your *Wort* Boils, you will make it too bitter: but I conceive it adviſeable to double the proportion, by taking out the firſt parcel when your *Wort* has Boiled half the time you deſign it, and then adding the ſame Quantity of freſh Hops to continue Boiling till you take your Wort out of the

the Copper. This will ſomewhat encreaſe your Charge, but that will be very inconſiderable, if you furniſh your ſelf in a Cheap Year of *Hops*.

HITHERTO of the Qualities and Proportion of your Materials. Now concerning the manner of putting them together.

AFTER you have put your Liquor in your Copper, ſtrew an handful or two or three of Bran or Meal upon it, not ſo much to Strengthen your Liquor, as to make it heat quickly, for Simple Water alone will be long e'er it boil; but you muſt take your Liquor out of the Copper when it begins to Simper, and not ſuffer it to boil: For tho' it were granted that the boiling did no harm to your Liquor, by evaporating the Natural Spirit of the Water (which is likely does) yet 'tis a needleſs Expence of Fuel and Time, firſt to make it too hot, and after to ſtay till 'tis cooler again: for you muſt by no means mix your Malt with boiling hot Liquor, which will make the Malt clot and cake together, and the moſt Flowery parts of it run Whitiſh, Glewy and Sizy, like Sadlers Paſte, ſo that it will never mix kindly, and give out its Strength equally to the Liquor.

I had not dwelt ſo long on this Head, but that I know many put their Malt firſt into the Meſch Fat and then pour their Liquor in for the firſt Wort, which is indeed neceſſary in the Second and Third Worts.

THE contrary Practice of putting in your Liquor firſt, has theſe Advantages.

FIRST

FIRST, You can otherwiſe gueſs when your Liquor is juſt cool enough to be mingled with your *Malt*; But in this caſe, you have a certain *Criterion* and *Rule* to judge by, that is, you muſt let your Liquor remain in your *Meſch-Fat* till the Vapour from it be ſo far ſpent, that you can ſee your Face in the Liquor: And then pouring your *Malt* upon it, you have this farther Advantage, that you keep your Liquor longer hot, and it ſinks Gradually, diſtributing its Strength to your Liquor equally, without matting, and if it does not deſcend faſt enough of it ſelf, you muſt preſs it down with your Hands or Rudder, with which you uſe to ſtir your *Moaks*. This muſt be done by degrees, always remembring that you ſhake your Sacks before you remove them over the ſides of your Meſch-Fat, to get out the Flower of your *Malt*, which ſticks to them: And after all your *Malt* is ſettled, and your Liquor appears above it, you muſt put up in your *Meſch-Fat* as much more hot *Water* out of your *Copper*, as will make in all 90 Gallons, for one Hogſhead, then ſtir it, almoſt without ceaſing, till it has been in the Meſch-Fat about 2 Hours from the firſt putting up your Malt, in which your Servants may help and relieve one another.

AFTER this pull out your Rudder, and putting a little dry Malt a top cover it cloſe, and let it ſtand half an Hour undiſturbed, that it may run off clear, and the Malt being ſunk to the bottom, the Liquor a top will run thro' it all again, and bring away the Strength of it. After this you muſt lift up your *Tap Staff*, and let out about a Gallon, not into your Tub underneath or *Underback*, which is to receive your *Wort*; but

but into your long-handed *Jett*, and put it back again, ſtopping your Tap-Hole: This do two or three times, till you find it runs clear, which it will not do at firſt, tho' your Tap-hole is never ſo well adjuſted.

THROUGHOUT the whole Courſe of your Brewing, you muſt be very careful to do all you can to promote the Fineneſs and Clearneſs of your Drink.

IN the *North* of *England*, where much the beſt Malt Drink is made, they are ſo careful of making their Drink fine, that they let their firſt Wort ſtand in their Receivers till it's very clear, all the groſs Parts being ſunk to the Bottom: This they continue to do about three Hours in Summer, and 10 or 12 Hours in the Winter, as occaſion requires, which they call *Blinking*; after which, leaving the Sediment behind, they only Lade out the clear Wort into the Copper; which Cuſtom is peculiar to the North, and wholly unpractiſed in other Parts.

WHEN it is run out into your Receiver, or Under-Back, Lade or Pump out your ſecond Liquor, order'd ſo as to be juſt then ready to boil on *Moaks*; and putting your firſt Wort into your Copper again, let it boil reaſonably faſt (which boiling the Hops put on it will much accelarate) for about an Hour and an half, for *March* or *October* Beer to be kept long: And one Hour for Strong Ale, to be Drank new; I know that a longer Boiling is generally adviſed; but I ſhall anſwer that when I come to ſhew the Reaſons why common *Brewers* ſeldom or never make good Malt Drink. I adviſe the Wort rather to be boil'd reaſonable faſt for the Time,

than

than to ſtand ſo long to Simmer, becauſe common Experience ſhews it Waſtes leſs, and Ferments better, after ſo long boiling, than ſimmering.

YOUR firſt Wort being thus boil'd, muſt be pump'd or laded off into one or more Coolers, or Cool-backs, in which leave the *Sullage* behind, and let it run off fine. The more Coolers, and the thinner it ſtands, and the ſooner it cools (eſpecially in hot Weather) the better: Let it run from your Cool-backs into your Tun very cool, and ſet it not there to Work in *Summer*, 'till 'tis as cool as Water; in *Winter*, it muſt be near Blood-warm, at leaſt the *Bowl* in which you put your *Yeſt*, to ſet the reſt on Working, muſt have a Mixture of Wort, hot enough to make it all Ferment. When you find it begins to Work up thick to a *Yeſt*, mix it again with your *Hand-Jet*, and when it has work'd it ſelf a ſecond time to a *Yeſt*, if you deſign'd it for Ale, and ſpeedy Drinking, and Hopp'd it accordingly, then beat in the *Yeſt* every five Hours, for two Days together in the *Summer* time, or more, according as the Weather is; and for three or four Days in *Winter*, covering your *Fatt* cloſe that it fall not into your Working *Tun*.

WHEN your *Yeſt* begins to Work ſad, and upon turning the *Concave* of your Bowl downwards, ſticks faſt to the inſide, then, skimming off the *Yeſt* firſt, cleanſe the reſt into your Veſſels, leaving all your Dregs in the bottom of your *Tun*, and putting only the clean up: After it has a little Fermented in your Veſſel, you will find it in a few Days fine, and fit for your drinking. Tho', according to the Quantity of your *Hops*, you may proportion it for longer keeping.

IF

IF you Brew in *March* or *October*, and have Hopp'd it for long keeping, you muſt then, (upon its ſecond Working to a *Yeſt*, after once beating in) cleanſe it into your Veſſel with the *Yeſt* in it, filling it ſtill as it works ove, and leaving, when you ſtop it up, a good thick Head of *Yeſt* to keep it.

IN brewing *March* or *October* Beer, it is adviſeable to have large Veſſels bound with Iron Hoops, containing two, three, or four Hogſheads, according to the Quantity you intend to make, putting all into one Veſſel. This ſort of Drink keeping. digeſting, and mellowing beſt in the largeſt Quantities.

YOUR Veſſels muſt be Iron-Hoop'd, elſe your *March*-Beer will be in danger to be loſt or ſpoil'd: Leaving your Vent-Peg always open, paſſes it; and if it happen to be faſten'd but ſix Hours together in the *Summer*, a ſudden Thunder or Stormy Night, may happen next Morning to preſent you in your Cellar an empty Veſſel, and a cover'd Floor.

IT is pretended that *March* is the beſt Month for Brewing, and the Water then better than in *October*; but I always found that the *October* Beer, having ſo many cold Months to digeſt in, proves the better Drink by much; and requires not ſuch watching and tending as the *March* Beer does, in opening and ſtopping the Hole on every change of Weather.

MANY Country Gentlemen talk of, and magnify their *Stale Beer* of five, ten, or more Years Old. 'Tis true, more Malts and Hops than I propoſe,

propoſe, will keep Drink longer than I uſe to do, but to ſmall purpoſe; for that it will not exceed mine in any thing deſirable, except ſuch an extraordinary Strength as few Men care for. I always broach mine at about Nine Months end, and my *March Beer* at *Chriſtmas*, and my *October Beer* at *Midſummer*, at which Times it is generally the beſt; but will keep very well in Bottles a Year or two more. Stop your Veſſel cloſe with Cork, not Clay, and have near the Bung-Hole a little Vent-Hole ſtopt with a Spile, which never allow to be pull'd out, till you Bottle or draw off a great Quantity together, by which means it is kept ſo cloſe ſtopp'd, that it fluſhes violently out of the Cock for about a Quart, and then ſtops on a ſudden, and purls and ſmiles in a Glaſs, like any bottled *Beer*, tho' in the Winter-time: But if once you pull out the Vent-Peg, to draw a Quantity at once, it will ſenſibly loſe this Briskneſs, and be ſome time before it recovers it.

I propoſe no Directions for the ſecond and third *Worts*; he that can manage the firſt well, can never fail in the reſt. Your Third *Wort* being poured out on hot Goods, may be only cold Water.

NOW, having given the beſt Directions for *Brewing* that readily occur to my Memory, I come to ſhew the Reaſons why common *Brewers* very ſeldom or never make good *Drink*: This I know is generally attributed to their underboiling their ſtrong *Wort*, which to prevent, ſome *Brewers*, to their Loſs, and no manner of Advantage to their *Drink*, have boiled them three Hours, which is thrice as long as needful, and all to no purpoſe.

IN

IN ſhort, the Reaſon why publick and common *Brewers* ſeldom or never brew good *Drink*, is, That they wet more *Malt* at once, than 'tis poſſible they can have *Veſſels* and *Servants* enough to Work, and ſet it cool enough to ferment kindly: And withal, brew ſo often, that they cannot ſufficiently, between one *Brewing* and another, cleanſe and ſcald their brewing *Veſſels* and *Barrels*, giving them due time to dry, but that they will retain ſuch a *Yeſt*, as will always char and ſour their Liquors: And the Miſchiefs accrewing by ſuch Neglects are incredible to Perſons unexperienc'd.

MY *Brewers* have been ſo cautious in this Particular, that if any Servants have, by Accident, made uſe of any long-handed *Jet*, Hand-*Jet*, or *Pail*, with cold Water, during the *Brewing*, they have ſcalded it a-new, and let it dry before they would uſe it again; which Method ought to be carefully obſerv'd by all Perſons that deſire to Brew good ſtrong *March* or *October* Leer.

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CHAP. IV.

Inſtructions for Breeding Horſes much Cheaper, and to a far greater Advantage than hitherto known. Of the Choice of the Stallion, and Stud-Mares.

THE ſame Care is to be taken in this Point of Choice, as the *Gardeners* take to have good Stock, and Coin to produce a Noble and Generous Fruit: If you deſign *Horſes* for Shape and Beauty, your *Stallion* and *Mares* muſt be exquiſitely Shaped, but more eſpecially the *Mare*; for in Creatures that Generate, *Partus ſequiter ventrem*, the Form and Shape of the Foal, is, for the generallity, more like the *Mare* than the Horſe If you deſign a Breed of Horſes for the *Team*, or *Cart*, the *Stallion* and *Mare* muſt be well Jointed; But take this for a general Rule in the Breeding of all ſorts of Horſes, that your *Stallion* and *Mare* be both of Lively, Brisk Natures; for Heavy and Dull Breeders will produce Lumppiſh Unprohtable *Colts*, unfit for Service, and not worth Rearing.

IN Choice alſo of your Breeders, be ſure they are Healthy and of ſound Conſtitution: For in Generations of all Animals, the Hereditary Diſtempers of the Parents deſcend to the Iſſue, and your *Colts*, for the moſt part, will have the ſame Diſtempers of the *Stallion* and *Mare*.

II. *Wild Mares not fit for the Race.*

IT is therefore your Buſineſs to Handle and Tame all your *Stud Mares*, which may eaſily be done by often leading them about, ſometimes with eaſie Burdens, and ſometimes by Backing them; keeping them to an eaſie Service will render them Tame and acquainted with their *Keepers*; and being thus ſoberly handled you may at all times, without difficulty, remove them from one Paſture to another; you may with eaſe bring them to be Covered, and take their *Colts* from them; When as *Wild Mares* are not only Troubleſome to keep, but they oftentimes deſtroy the *Colts* in their Bellies by their Wild running, and leaping over Ditches and Hedges.

III. *At what time your* Mare *is firſt to be handled and Covered.*

When your *Mare* is about two Years Old is the beſt time to take her up, and to make her Tame, and to break her, and the Year following, when ſhe is full three Years Old and upward, you may put her to your *Horſe* to be Covered. Some Writers are of Opinion that it is beſt to bring a *Mare* to the *Horſe* at two Years, but I have proved the contrary by Experience, which is the ſureſt Judge, and the moſt Faithful Director.

IV. *How*

IV. *How to force your* Mares *to come to be Covered.*

Before you bring your *Mare* to your *Stallion*, you muſt for ſome time, put her into a cloſe Paſture kept and fenced for that purpoſe, and put to her a ſmall *Stoned Horſe* to Wooe her, but be ſure he be in no wiſe longer Unfetter'd than ſome diligent Perſon be preſent to keep her from being Covered by him, ſhe will be ſure to be covered by him, tho' he be lower than ſhe by a Cubit. Having thus excited your *Mare* to Generation, bring her to your great *Horſe*.

V. *The Order of Covering.*

When you perceive your *Mare* will abide the *Horſe*, and doth ſhew Tokens that ſhe is deſirous to be covered, you muſt take care that the *Horſe* that is to cover her be well Provender'd, and that he does not Drink much the Night before he ſhall cover her; then in the Morning following at the *Sun-Riſing*, you may bring him to your *Mare*, in ſome ſuch place as neither of them can leap out, where, when he hath Cover'd her twice or thrice, let him remain Feeding on Graſs with her without any Water, then let your *Horſe* be taken up, and well Rub'd till the next Evening; then put him to your *Mare* again in the ſame Place, and let him Cover her as often as he will that Night, except you ſee him Chafe o much as will do him a Prejudice.

VI. *How to order your* Mare *when Covered.*

WHEN you have taken your *Mare* from the *Horſe* the ſecond time, which muſt not be till the Morning following; which time (except your *Mare* be ſatisfied with that which was done before) you muſt put your *Horſe* to her the third time, and when he hath Cover'd her as often as he will, between four of the Clock in the Morning, and eight of the Clock in the Fore-noon, take up your *Horſe*, and let your *Mare* be led into ſome Water to the middle, at leaſt, where ſhe may Drink, but not too much, and then let her be led and put into the *Stud*, where no other *Horſes* muſt come near her.

VII. *How to keep your* Mares *from being Barren.*

WHEN you have ſeverally cauſed all your *Mares* to be Covered, as before, you muſt about *Lammas*, in the Month of *July*, or the beginning of *Auguſt*, get a *Mare* or two which have not been Covered that Year before, and cauſing them to be *Horſed* according to the foregoing Direction, when they are ready to be Covered you muſt turn them to ſome other *Stallion* (which you eſteem not to be your beſt *Horſe*) amongſt your *Stud* of *Mares*, and ſo he, Covering that *Mare* or *Mares* you turned with him into the *Stud*, ſhall cauſe the reſt, if any of them have not Conceived at their firſt Covering) to come to that *Horſe* again; whereby you ſhall be ſure to keep no *Mare* Barren all the Year but to have of every *Mare* a *Colt*, tho' not by your beſt *Horſe*; You may ſuffer that *Horſe* to run amongſt your *Mares* for the ſpace of three Weeks or a Month.

But if you turn him into your *Stud*, putting no *Mare* with him ready to be Covered, he will at his first entrance beat all your *Mares* and by hurting those which had before Conceived, will do you more Hurt than Good.

VIII. *What time of the Year is best for your* Mares *to be Covered.*

THE best time of the Year to have your *Mares* Covered, is from the end of *May* to the end of *July*, and then shall your *Mare*, which always goes with *Foal* one Year lacking a Month, *Foal* in such time of the Year as she shall find Plenty of Grass to Nourish herself and her *Colt* withal. Whereas, if you suffer her to be Covered in *February*, *March* or *April*, she will *Foal* so early in the Year, that for want of Food she Starves both herself and her *Colt*; for 'tis to be Noted, that neither *Hay* nor *Oats*, nor any other Provender, will so well Nourish a *Mare* and Breed Milk for the *Colt*, as will Grass eaten off the Ground.

IX. *How to Diet your* Stallion *for the time he shall Cover.*

IT is here to be Noted, That altho' your *Stallion*, standing at hard Meat, will not miss to get a *Colt* on your *Mare*, going to Grass (if she be order'd as before) yet the best Diet for him, during the whole time he shall Cover, is to Feed on Grass: When he hath tasted of the Grass with the *Mares* he like his Hay the worse, and also there is more danger of breaking his Wind in feeding on *Hay* than on *Grass*.

X. *How your Breeding* Mare *is to be us'd when she shall Foal.*

Your Breeding *Mare* that hath a *Foal* in her Belly, must 14 or 15 days before the *Foal*, be taken from the *Stud*, and with some other Gentle *Mare* or *Gelding*, be put into some Rank Pasture, well Fenced for that purpose; which not only makes her strong, and able to *Foal* without danger, but will also afford Plenty of Milk to her *Colt* when first *Foaled*, and will soon make her ready to be Covered again.

XI. *How long a* Horse *will be able to Cover your* Mares.

Your *Stallion* used as is before appointed will serve for six or seven Years to Cover every Year seven or eight *Mares*, and do you Service the rest of the Year besides: Whereas, turned Abroad to your *Mares*, he can do no other Service, nor will he last above three Years at most.

XII. *The best Age for* Horses *and* Mares *to get and bear* Colts.

The best Age for the *Mare* is from three Years Old to ten, and for the *Horse* from four or five Years, till twelve; and after that Age the *Colts* of them prove Heavy, Weak and Slothful.

XIII. *What time of the Year is best to Wean the* Colts.

The best time of the Year to Wean *Colts* is at *Candlemas* or *Shrovetide*, after the time your *Colts*

Colt is Foaled: In this reſpect you muſt be very diligent; for if your *Colt* be not well Weaned: well *Summer'd* and *Winter'd* for the three firſt Years, when he moaneth for his Dam, he ſhall ſeldom or never come to be a good *Horſe*: And therefore, when you wean your *Colt*, you muſt bring him to ſome Houſe for that purpoſe, quite out of the hearing of his Dam, where they muſt be kept, and not ſuffered to come Abroad. Near this place you muſt have Paſtures, wherein they may Air themſelves, and Play every fair Day, for ſome time after the fourteen Days is paſt, from the time you begin to Wean them till Graſs is fully grown in *May*, then put them into ſuch ſuch Paſtures as commonly your Milch Kine is fed in, where they may not, by Feeding in high and rank Graſs hurt their Reins, and grow thick Neck'd, or by want of Food ſpoil their Growth; but feed them in a thick, ſhort, ſweet Graſs, till they have forgotten their Dams.

XIV. *What Feeding is beſt for* Colts, *from upwards of two Years.*

This is a General Rule, that wet Lying, and lack of Feeding in *Summer*, from 2 Years Old forwards, doth ſpoil the greateſt part of our Breed of *Horſes* in *England*, which in my Opinion, if well order'd would Breed the beſt *Horſes* for all kind of Service, of any Country in the whole World. For as Wet lying, and want of good Feeding in the *Winter* doth Breed an Heartleſs ill-ſhap'd *Horſe*, ſubject to all Cold, and Wat'ry Diſeaſes both in his Body and Limbs ſo over Rank Feeding in *Summer*, chiefly from two Years Old and upwards, doth Breed

an Evil Veined, and Sothful *Horſe*, ever ready (being over Laden with fat Fleſh) to get *Coughs*, and catch the *Glanders* upon every Cold ; and therefore your beſt feeding of your *Horſe Colts*, from two Years Old and upward, for the *Summer* Feeding, is where he may have a large Walk, and hungry ſhort Feeding, and not yet ſo bare but that he may (Travelling for it) feed himſelf full once in a Day, and that he hinder not himſelf of his Growing ; but in any wiſe keep your *Horſe Colts* from Covering any *Mare* till they be full five Years Old.

XV. *Why* Engliſh Horſes *taken up ſo Young are not Good.*

THE Reaſon why our *Engliſh Horſes* be taken up ſo Young, as I have heard ſeveral of our chief *Horſe-Maſters* ſay, is for that our *Horſes* being Great and well Fed, if they ſhould run long till they come to their full Strength, would be ſo unruly and miſchievous in their Breaking, that they would rather miſchief themſelves and their Breaker, than be made Tame and Gentle : This is their Opinion, which I fancy is very Vain and Idle ; for there never yet was ſo Sturdy, ſo Unruly, and Wilful a *Horſe* which could not be made Tame and Eaſie to handle by Watching and Hunger in one Months time at fartheſt, if his Keeper would uſe Diligence.

XVI. *The Manner of Handling an Unruly* Horſe.

THIS may be moſt conveniently brought to paſs, if at firſt coming into the Houſe, before he will ſuffer his Keeper to handle him or to take

take up his Feet, he do put no Meat before him, either in the Rack or the Manger, but let him take all his Feeding at his Keepers Hands; ſo ſhall you make him Gentle and Tame without Stripes or Striving; and the Order before appointed in his Breaking, he being the *Colt* of a Tame *Mare*, and fed ſome part of every *Winter* at Hand in the Houſe, he will be almoſt Tame before he comes to be broke, and will ſeldom prove a Skittiſh, Fearful, or Unlucky *Horſe*.

XVII. *Of the Manner of uſing the* Horſe *after he is Handled.*

WHOSOEVER doth keep his *Horſe* Bridled and Saddled after Riding a Journey, and let him champ his Meat at the Bit till he is in good Temper and almoſt Cold, and then Rub the Saddle place well, and doth not give him Water when hot and empty, or ride him faſt on a full Stomach, ſhall ſeldom or never have his *Horſe* Sick or Lame, if he be Bred as is before-mentioned, before he take him up for the Saddle.

XVIII. *What Feeding is beſt in* Winter *for* Mares, Weanlings, *&c.*

FOR your *Winter* Feeding you muſt uſe one Order for your *Mares* and *Weanlings* of two Years Old in ſeveral places, with a Hovel or Houſe made for them adjoyning to your *Winter* Paſture, wherein you muſt ſometimes, in the hard Weather, in a Rack made for that purpoſe, give them ſome Fodder, and be ſure that they be brought into that Houſe every Night that is like to prove Wet, but in the Froſty Days and Nights it is beſt to pin them up Abroad.

You must by all means, keep one Pasture nigh to your House, wherein you may feed your *Mares* and Colts in the *Winter* time, which Pasture must not be fed in till *Shrove-Tide*. At which time, and till the middle of *May* (before which Grass is not sufficiently sprung in most places for *Horses* to feed on) is the time of most danger of being spoiled with Hunger of any part of the Year; in which time your *Colts* growing all the *Summer* following, will make your *Colt-Mares* so very bare that they shall not be able to Foal, and have Milk sufficient wherewith to Suckle their *Colts*.

XIX. *At what Age* Colts *may best be Handled.*

When your *Horse-Colt* hath been bred as is aforementioned, the best Age, in my Opinion, to take him to break, is when he is full four Years Old and the Vantage; or if you may spare him and have good close Ground to keep him in, rather at Five Years Old and the Vantage, for then will his Joints and Sinews be Strong and well Knit, his Hoofs tough and not brittle, his Eye sight good, his Chin strong; so that you cannot hurt him either in Breaking, or in reasonable Riding: And besides this, he will last a good *Horse* till he is 24 or 25 Years Old: Whereas if you take him up at two or thre Years old, as we in *England* commonly do, you shall soon afterwards find him many times Blind, and brittle-Hoofed, weak-Back'd, full of Windgals and Splints, and he will show himself to be an old stiff *Horse* before he comes to be Ten Years of Age; as are most of the *Spanish Horses*, because

beeause they are taken up so Young: The chief Reasons of which is, That in *Spain* they have no good Close Ground to let their *Colts* run longer in.

WE in *England* are sufficiently provided with Enclosures and Lands fit for the Breed of all sorts of *Horses* and other *Cattle*, and these Lands cheap enough Rented, especially in the North parts of *England*. Our *Horses* are the most esteem'd of any, in Foreign parts, and have this good Faculty with them, that when ever they breed abroad they lose the *English* Strain, and dwindle to the Strain of the Country where they are got; so that Foreign Parts can never be furnished with *English Horses*, but from *England* it self. And the Profit of sending our *Horses* to Foreign Parts has been sufficiently discover'd by some *Merchants* in *London*; and since the Peace last made with *France*, our *Farmers* have Experienced the Advantage of Breeding *Horses* since at that time the *French* Kings Subjects came to their own Doors, and gave them three times the value for their *Horses* than formerly they could have Sold them for. At the Conclusion of this present War, we may with Presumption say, That there will be a great Consumption of *Horses* in Foreign Parts, and that then they will become as Good a Commodity as at the time before mentioned; and therefore I leave it to the Consideration of our *Gentry*, who have Lands, proper for Breeding of Cattle, and of the *Farmers* who Rent such Lands better than Breeding Good and Serviceable *Horses*.

TO what has already been said Concerning *Horses*, *Mares*, &c. I shall only add that it would be very requisite to have a little Stable built

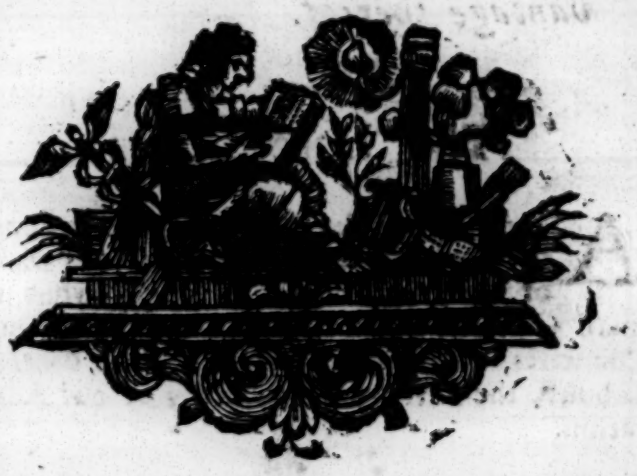
built in the Field where your breeding Mare has her Paſture, without any Rack, Manger, or Door to it: And this I have obſerved to be the Cuſtom among your beſt *Breeders* in *Yorkſhire*, a Country remarkable for fine Horſes.

AND indeed the Reaſons are very obvious; for the building ſuch a Place is not only neceſſary to preſerve your young Foal from the Inclemency of the Weather, but it alſo tends to preſerve and Encreaſe the Strength of your Mare all the Winter, She having a place of Shelter and Retreat from a rigorous Seaſon of Froſt and Snow, and alſo from wet Weather; for Rain will waſh away the Fleſh of any Beaſt, and make him very lean and weak. You would do well alſo to place a quantity of Straw in your Stable. My reaſon for not having a door to the Stable is, becauſe as no perſon does daily attend upon his breeding Mare or young Foals, ſo by chance they may be ſhut in if a door were affixed, and either Starved or rendered ſo weak for want of Food, before a diſcovery of their unhappy condition may be made, that they will be of little uſe afterwards; or if they ſhould recover, it would coſt much Money and take up more Time to effect it than will ſuit with the Conveniency and Pleaſure of the Owner.

AND here let the induſtrious Farmer obſerve, That by giving his Foals as much Liberty as poſſible, it will add very much to their Growth, and give great Beauty and Delicacy to their Limbs; when on the other hand being too much confin'd, they become clumſey, ill ſhap'd, and dull.

RE-

REMEMBER to turn your Horſe or Mare to Graſs and to take them up from it in a dry Seaſon; eſpecially if you intend that their Coats ſhould be ſmooth and fine: and if you give them a few Oats twice or thrice in a Week, it will keep them in good Heart. Take care not to ride your Horſe hard when firſt taken from Graſs, leſt you break his Wind; and when you Houſe him, let him be well purged, leſt the Greaſe ſettles in his Heels.



CHAP.

CHAP. VII.

Of the Husbandry and Employment of Bees, *and the great Profit and Advantage thereof.*

The Introduction.

AMong all the Creatures which our Bountiful God has made for the Use and Service of Man, in respect of great Profit with small Cost, of their Ubiquity or being in all Countries, of their comely Order and continual Labour, the *Bees* are most worthy of our Admiration.

FOR first with the Provision of a *Hive*, and some little Care and Attendance, which need be no Hindrance to other Business, but rather a delightful Recreation in the midst of our Labours) they bring sweet product both for Food and Medicine.

THERE

THERE is no Fruit, or Flower, no Wood, or Forreſt, no Hill or Dale, no Promontary or Campaign Land, no Fruitful or Unfruitful Soil, but what affordeth Matter for the *Bee* to work upon.

IN their Labour and Order at home and abroad, they may be a Pattern unto Men both of the one and the other; for unleſs they are hindred by Weather, and Weakneſs, or want of Stuff to work upon, their Labour never ceaſeth; and for their Order it is ſuch that they may well be ſaid to have a *Commonwealth*, ſince all they do is in common without reſpect to private Intereſt. They Work for all. In their private Quarrels, when they are from their *Hive*, how much ſo ever you abuſe them, they will not reſiſt if they can by any means get away; but when they are at their *Hive*, the common Treaſury for themſelves and their Young they'll fight it out and contend for this properly to the laſt Shanks. The Epithets given to *Bees* by ſeveral Authors which have written on this Subject are *Profitable*, *Laborious*, *Buſie*, *Loyal*, *Swift*, *Nimble*, *Quick of Scent*, *Bold*, *Valiant*, *Cunning*, *Chaſte*, *Neat*, *Brown and Chilly*.

I. *Of the* Bee-Garden *and Seats for the* Hives.

I. Your *Bee-Garden* muſt be in a Plat of Ground, near your Houſe, that you may always have them in ſight, your Aſſiſtance being often ſuddenly required in all Storms and Fighting, when 'tis your Buſineſs to provide them with a new Houſe, and to part them in the Fray.

II. See that they be ſecurely fenced from all Cattle, and eſpecially from *Hogs*, and that they be ſecured from Wind, that when the *Bees* come Home laden, and weary, they may ſoon ſettle at their *Hives*.

III. Let your North fence of your Garden be very cloſe, and high withal, to ſecure them from the piercing Winds of the Quarter, and therefore if poſſible, ſet your *Bees* on the South ſide of your Houſe, where they will have moſt Sun in *Winter*, and beſt ſettle to their *Hives*.

IV. Let the Eaſt Fence of your Garden be big and high, to keep the *Bees* as well from the Wind as Sun, for the Morning Sun does often bring them forth of their *Hives*, when the Wind is ſo cold and ſharp that they cannot endure it. But in no wiſe let the place be ſhadowed from the South Sun, for that does not only dry the Leaves, and relieve the *Bees* in *Winter* and *Spring*, but cauſeth them to Swarm in *Summer*.

A Houſe, or Wall, or good Pales, is fitteſt for the North fence, and a *Quickſet* Hedge for any of the other Quarters, and it may ſerve for the firſt, if it be thick.

Take care that the Garden be always kept clean and ſweet, free from Noiſome Scents. I have known a good *Hive* ſpoiled by having *Poultry* Rooſt over them.

TAKE care that it be neither cold in *Winter*, nor very hot in *Summer*, *Locus Æſtate non fervidus, hieme tepidus*. A bare Flower is very

ry prejudicial; a Grassy Ground I esteem to be best; but let it be kept cut in *Summer*, for long Grass harbours the *Bees* Enemies, and let it not be wet in *Winter*.

LET it be conveniently set with Trees and Bushes, fit to receive the Swarms, as *Plumb*, *Cherry*, *Apple*, *Filberds*, *Hazels* and *Thorns*, and these chiefly in the *South* and *East* Fences, and not too near the Stalls.

THE Place being thus fitted, the Seats are to be provided, which whether Stools or Benches, must be set a little Shelving, that the Rain may neither run into the *Hive* nor stay at the Door.

'TIS not good to set many Stalls on a Bench, because in *Winter* it may cause the *Bees* to fight; for hereby they have Access, by Foot, to one anothers Houses, which they may sometimes mistake for their own.

THE single therefore are best, which I would advise to be set at least two foot apart, and rather supported with four Legs than to be flat on the Ground; if the Legs are 12 or 14 Inches, 3 or 4 Inches may be forced into the Ground for their surer standing.

FOR their size they should not be above half an Inch or an Inch without the *Hive*, save only before where there ought to be the space of 3 or 4 Inches, that the *Bees* may have room enough to light upon it.

THE best Stools are of Wood, those of Stone are too hot in *Summer*, and too cold in *Winter*.

THE

THE Stools muſt be ſet towards the South, or rather with a Point or 2 towards the Weſt, that the *Hive* may ſomewhat break the Eaſt Wind from the Door, and that the Door may be light at Sun ſetting.

THE Stools ſhould ſtand in ſtrait Ranks or Rows from W. to E. five foot one from another, meaſuring from Door to Door, and from S. to N. ſix foot one behind another; beſides, let them ſtand as far from 3 of the fences as they do from one another.

THE number of the *Hives* in a Garden is not to be determined. But it is generally computed that the Climacterical Number of nine times ſeven which is alſo the Climacterick of Man is a ſufficient Stock for a *Bee-Gardeen*; and out of this a Man may ſupply himſelf with a Competent Maintenance.

XI. *Of the* Hives, *and manner of Dreſſing them.*

IN ſome Countries they uſe *Hives* made of Straws bound with Brambles; in ſome Wicker *Hives* made of Privy, Willow, or Harl dawbed with Cow Dung, tempered with Gravelly Duſt, or Sand or Aſhes.

THE Straw *Hives* are the beſt, becauſe in them the *Bees* do beſt defend themſelves from the Cold when they hang round together in the form of a Globe, (which the *Philoſophers* do account a perfect figure) and therefore the nearer the *Hive* doth come to the form thereof, the warmer and ſafer will the *Bees* be kept; but

of Neceſſity the bottom muſt be broad for the upright and ſure ſtanding of the *Hive*, and for the better taking down of the Combs, and the Top muſt riſe from 2 or 3 Inches higher than the form of a Globe.

A handle on the Top of each *Hive* is Requiſite for two uſes, *viz.* carrying the *Hive* and ſtaying the Hackle from falling off.

YOUR *Hive* muſt be of any ſize between 5 or 7 Gallons, that any Swarm of what quantity or time ſoever may be fitly *Hived*. Have always by you *Hives* enough in Store, but moſt of the middling ſort, leſt you ſhould want when you have an occaſion

YOUR *Hive* being thus made, it muſt be dreſs'd after this manner; take off all the ſtaring Straws, Twigs and Jags that are offenſive in the *Hive*, and make it as ſmooth as poſſible; if you need but few *Hives*, you may prune them clean with a Knife, if many, then you may Singe or Sweep the Inſide, but do it which way you will, rub it well at laſt with a peice of a Grind-Stone or rough Sand-Stone.

YOUR *Hives* being pruned put in your ſpleets 3 or 4 of them as the largeneſs of your *Hive*, ſhall require, the upper ends whereof ſet together at the Top of the *Hive*, and the lower faſten about a handful above the Skirt; beſides theſe ſpleets within the *Hive*, the ſtraw *Hive* muſt have four other ſpleets driven up into the Skirts to keep the *Hive* from Sinking when it is Loaded, two of them are the two Door Poſts, the other two are hind-Poſts ſet at equal diſtances.

IN

IN Swarming time, Seaſon the *Hives* that you are minded to uſe thus; rub them down with ſweet Herbs, ſuch as the *Bees* love, as *Thyme*, *Baum*, *Savory*, *Marjoram*, *Fennel*, *Hyſop*, *Mallows*, *Bean-Top*, &c. And when the Swarm is ſettled, take a Branch of the Tree whereon it is and wipe it clean, and then wet the inſide of your *Hive* with a little *Honey*, *Mead*, or *Salt* and *Water*, or *Small Beer*. And thus the *Hives* are to be prepared and dreſſed.

YOU muſt be ſure always to keep your *Hives* cloſe covered, and the beſt covering is a thick Hacle. *Alvearia Straminea operire utiliſſima*. The manner of making the Hackle is thus, take four or five good handfuls of *Wheat* or *Rye-Straw* drawn out of the Sheaf; beat out the *Corn*, draw out the Ears of each handful longer on the one ſide than the other, and putting the long ſides together in form of a *Sugar-Loaf* for caſting off the Rain, bind them all in one under the Ears as faſt as you can: The head is to be covered and bound faſt with a Cap which muſt be artificially wreathed or platted on the top. For the length of the Hackle each one is to be fitted to the *Hive*, ſo that the Skirts thereof may reach to the Stool, or within half an Inch of it round about, ſave only, before where it muſt be parted ſomewhat ſhorter, that the *Bees* paſſage be not hindered; and then gird the Hackle cloſe to the *Hive*, leſt the Wind diſorder it: The Hackle thus fitted and placed is now and then to be removed, not only to meet with *Mice*, *Moths*, *Spiders*, *Ear-wigs*, &c. which harbour under it; and to ſee what breaches the *Mouſe* and *Titmouſe* have made, but alſo to Air the moiſt *Hive*; and this muſt be done in a warm and windy Day after much wet.

IN

IN the next place your *Hives* muſt be kept cloſe for Defence of the *Bees* againſt their Enemies, the beſt Cloom for the purpoſe is Cow-dung tempered with Lime or Aſhes, with Sand or fine Gravel, which are alſo good againſt the gnawing of *Mice*; with the Cloom cloſe up the Skirts and Bracks of your *Hives*, that there be no way into them but only by the Door, and then take care not to move them without urgent occaſion.

WHEN you have occaſion to remove them, Tile up a ſide of the *Hive* with a little Tile Shard, leſt the *Bees* ſhould be cruſh'd by the Rhum of the *Hive*, and when removed, Cloom them up faſt again as before directed.

CARE muſt be taken of the *Bees* entrance into the *Hive*, which muſt have three Doors; a *Summer* Door which muſt be made of ſuch a ſize, that the *Bees*, in *Summer*, when their Number is greateſt, may have Air enough, and free Egreſs and Regreſs: The ſpace of four ſquare Inches is ſufficient for any Stall.

THE *Summer* Door is thus made, firſt cut away the loweſt Rowl the ſpace of five Inches, and with the Thread which bound that part make faſt both ends, then fill it up again, the two extream half Inches of the Place with two Door Poſts, which are Splits of four or five Inches long run thro' the bottom of the *Hive*.

THE *Winter* Door or Wicket, is made of a piece of Wood an Inch and a quarter thick, and almoſt an Inch high, and five Inches long; at each end whereof cut away half an Inch, all ſave before, leaving (as you ſee fit) the uncut ends

a quart thick with the full height to fit the Door Posts, then in the middle of the neither side, cut thro' the thickneſs a paſſage of a third part of an Inch wide, and three Inches long. The uſe of this Door is to reſtrain the paſſage, when there needeth not ſo much Room, that the *Bees* may the better keep out the *Robbers*, that the Cold may have the leſs force, and that the *Mice* may not enter.

THE Bar or Shutting is to be made four Square of ſome heavy matter, as *Lead* that neither the Wind nor the Crafty *Titmouſe* may remove it: With this Bar you may ſhut or half ſhut your Wicket, as you ſee occaſion, to defend your *Bees* according to the Rigour of the Seaſon.

EVERY *Hive* ought to have its Settle before it, which is a piece of Board of the breadth of the Stool, and that length it may ſtand leaning from the Ground to the fore-part of the Stool, on which the *Bees* may ſettle when they come home, and on which they may *Sun* themſelves.

I ſhall conclude this Chapter with giving you ſome Rules for ordering your *Hives* in the four Quarters of the Year. But you muſt underſtand that the four Quarters of the *Bee* Year begin one Month ſooner than the *Aſtrologers*: And contrary to uſual Cuſtom I muſt begin with the *Summer*.

IN the *Summer* Seaſon the *Hives* muſt have their large Entrance open, that they may have Air enough, and that they may not hinder one another as they return home from their work, or be ſtop'd in Swarming; and therefore at *Gemini* ſet the

Doors

Doors wide open without Bar or Wicket, and ſo let them ſtand all this Seaſon.

THE *Bees Autumn* begins at *Virgo*, which is the moſt dangerous time of the Year for *Waſps* who, now learn the way into the *Bees Hives*, and Rob them of their *Honey*, therefore ſhut up your *Winter* Gates and Bar them cloſe to keep out the *Thieves* and *Robbers*.

THE *Bees Winter* begins with *Sagittarius*, in which, as Plants lie ſtill in the Earth, waiting the *Suns* return to revive them; ſo the *Bees* lie ſtill in their *Hives* ſleeping away their Fruitleſs Hours, and living on the Product of their *Summers* Labours: Yet if there happens a Mild and Warm Day they preſently go abroad to take the freſh Air, Recreate themſelves, Drink, Exerciſe their Wings, carry forth their Dead, *&c.* and having thus refreſhed themſelves, return to their *Hive*; but many of theſe Days are dangerous, becauſe by warmth of the Weather they imagine the *Summer* is at hand, and ſo they Revel and conſume the Victuals which they would ſpare in *Froſt* and *Snowy Weather*. You muſt be ſure this Quarter to keep your Doors cloſe ſhut when it is cold Weather, and never to open them but in a warm Air, and beſure you ſhut them again at Night.

THE laſt Quarter of the *Bee* Year is the *Spring* which enters with *Piſces*, at which time the *Plants* begin to Sprout, and the *Bees* begin to Breed again. The firſt fair Day, therefore in this Quarter, open the Doors of your *Hives* and ſo let them continue; for the Colds will not at this time of Year hurt your *Bees*, and the Dry cold will do them more good than hurt: The weaker

Swarms

Swarms which are more ſubject to Cold, you muſt leave but juſt room enough in the Door for one *Bee* to paſs, that the *Robbers* may not have too large an Entrance; for now, by the help of the Sun, they are able to maintain a Vigorous Siege.

AT this time in a Morning befor the *Bees* come much abroad, gently lift up your Hive, and quickly ſweep away the dead *Bees* and other Rubbiſh, and ſcrape your Stool clean, then ſet the Hive down and Chlom it cloſe up.

III. *Of the breeding of* Bees, *and of the* Drone.

THERE is a great Conteſt amongſt *Philoſophical Bee-Maſters* how the *Bees* are generated, ſome are of Opinion that they never generate but receive and bring home their Seed from *Flowers*, others ſay that they have amongſt 'em both Sexes, yet do not agree which are the Males and which are the Females.

THE Drone is a groſs Stingleſs *Bee*, that ſpendeth his time in Idleneſs; yet is there ſuch a Neceſſary Uſe of him, that without him the *Bee* cannot be: It is the Opinion of ſome that he is made of a Honey-Bee, which is even as likely, as that a Dwarf having his Guts pulled out ſhould become a *Gyant*. The Truth is, the *Drone* is of the ſame ſpecies with the Honey-Bee, but of a different Sex, and by whoſe Maſculine Vertue, and Natural Heat, the Honey-Bee ſecretly Conceiveth, and beginneth their Breeding at the Suns Entrance into *Piſces*, when they firſt gather on Flowers; but their chief time is in *Aries*, *Taurus*, and *Gemini*, which

which Months yields *Ambroſia* in great Plenty Variety and Vertue.

THE *Bees* will beſure to ſerve themſelves firſt, their firſt Generation being always Females.

IV. *Of the Swarming of* Bees, *and Hiving of them.*

THE *Stocks* having Bred and filled their *Hives* do ſend forth their *Swarms*, which conſiſt of ſuch parts as doth the *Stock* ; namely, of a *Queen-Bee*, *Honey-Bees*, as well Old as Young and *Drone-Bee*

MANY are of Opinion that the Swarm conſiſteth only of Young *Bees*, and that the Old ones tarry behind ; yet indeed the Swarm is not Younger than the Stock, for there is both of both ſorts. The Young *Bees* remain with the Old for their Defence, and for the greateſt Labour ; and the Old ones go with the Young in the Swarms for their Aid and Guidance in the Work. The *Drones* they take with them for the Propagation of their Kind ; and therefore thoſe Swarms that have many *Drones* with them will ſurely proſper.

A Warm, Calm and Showry Spring cauſe many and ſtrong Swarms ; but ſudden Rains prevent them Dry Weather makes Plenty of *Honey*, and Moiſt of Swarms. The chief time for breeding *Bees* is the *Spring*, and the *Summer* for gathering of *Honey* ; ſo that when a dry *Summer* followeth a moiſt *Spring*, the *Bee-Folds* will be Rich.

THE *Bees* delight to Swarm in Calm Warm Weather, but eſpecially in a hot Gleam, after a Shower of Rain. The Swarms for the ge-

 nerality

nerality riſe between the Hours of nine and three, and ſometimes an Hour ſooner or later. But they chuſe rather the Forenoon, if the Weather pleaſe them.

THE Swarming Months are two, *Gemini* and *Cancer*, that is, one Month before the longeſt Day, and one Month after.

THOSE Swarms that come in the firſt Swarming Month are very good; but ſuch as come in the laſt Fortnight of the laſt Swarming Month are but indifferent. Thoſe that come before the blowing of *Knap-Weed*, come in very good time, and before the blowing of *Black-berry*, but *Black-berry* Swarms are never good.

A good Stock doth uſually caſt a Prime Swarm, and an After-ſwarm: One firſt Swarm is worth two or three After-ſwarms, unleſs the prime Swarm be divided in the Swarming, or ſome part thereof ſtay behind.

THE Signs of the *Hives* fulneſs, and readineſs to Swarm, are ſeen at the *Hive* Door, 1. By the *Bees* hovering in cold Evenings and Mornings. 2. By the moiſtneſs or ſweating on the Stool. 3. By their haſty running up and down. 4. By their firſt lying forth in Foggy and Sultry Mornings and Evenings, and going in again when the Air is clear. 5. When they will Swarm, ſometimes they gather together without the Door, not only upon the *Hive*, but the Stool alſo, which is a Sign of Swarming; but when they lie and hang forth continually, it is a Sign that they will not Swarm.

FOR

FOR those Stocks which not Swarming in *Gemini* happen to lie forth, keep the Hive as cool as may be, by Shadowing of it, and Watering round about it, and by enlarging the Door to give them Air, and move the Cluster gently with your Brush, and drive them in.

FOR such as will not Swarm, your best way is to double the Stall, by turning the Skirt of the Hive upwards, and setting an empty prepar'd Hive upon it, into which they will ascend, and Work and Breed as well as in the Old. Such a Stall will be very good to be taken, or being Young to be kept.

THE Signs of after Swarms are more certain, the Sign being always heard before they begin to Swarm.

IF the Prime Swarm happen to be broken, the Second will both call and Swarm the sooner, it may be the next Day, and by that occasion haply a third and sometimes a fourth, but all within a Fortnight after the Prime Swarm, except in some extraordinary Years both for Breed and Honey. After a second Swarm, I have heard a Young Lady Bee call, but the Queen not being willing to part with any more of her Company, did not Answer, and the next Day she with seven others were brought forth Dead, and sometimes when the Queen hath given her Consent to a third or fourth Swarm, the Bees finding their Stock like to live, shew themselves loth to go out.

WHEN the Swarm is up, it is common to beat either a *Pan*, *Kettle*, *Mortar*, or *Brass Candlestick*, &c. very near the place where

'tis convenient for the Swarm to pitch, and the *Bees* will follow the Sound; and if they are got up into the Air, the Sound will bring them down, or else you may fling Duſt or Sand at them, which will cauſe them to pitch.

SOMETIMES they ſtill fly ſo faſt that you cannot take them; and then they belong to the happy finder; yet the Law of *Chriſtendom* allows you to follow them into any Place where you can ſee them. Sometimes they will lodge themſelves in a hollow or in an empty *Hive*, and therefore it is convenient to keep empty *Hives* in your Garden. *A poor Woman having taken a Swarm to keep for half, by New-YearsTide, had loſt her half and her Partners; and being careleſs of the* Hive *when the* Bees *were dead, ſhe let it ſtand abroad till ſhe had forgotten it. The next* Summer *coming into her Garden, ſhe found ſome* Bees *paſſing to and from her* Hive, *which* Bees *were then buſie in Cleanſing and Dreſſing it. She wiſely fearing that the* Bees *came to carry away the Wax that was left, bid her Daughter take the* Hive *and carry it in, The Wench following her Play, did happily forget her Mothers Commands, and by that means the* Hive *ſtood till an unexpected Swarm came, which afterwards Stocked her Garden.*

THE manner of *Hiving* a *Swarm* is as followeth; when the *Swarm* is ſettled and at the biggeſt, having prepared your *Hive* as before is Ordered, Take a Mantle, or any convenient Broad Cloth, and lay it on the Ground juſt under the Swarm, then take two Reſts, which are pieces of Wood, ſomewhat longer than the bottom of your *Hive* is broad, and about an Inch and a half thick; theſe lay at equal diſtances on your Cloth, no

further

further aſunder than that the bottom of the *Hive* may reſt upon them both: You muſt alſo have a Bruſh made of a handful of *Roſemary*, *Hyſop*, *Fennel*, or other *Bee*-Herbs. This being finiſhed, let the *Hiver* firſt drink of the beſt *Beer* and waſh his Hands and Face therewith, then let him go gently to Work, taking good heed where he ſets his foot and how he handles: Having laid his Reſts and Mantle, let him hold the *Hive* in one Arm, and ſhake the *Bees* into it, and immediately, with great gentleneſs, ſet the *Hive* on the Reſts, If any of the *Bees* remain behind or return to the place of the Swarm, let him lay in the place ſome ſtinking *Arable*, or other noiſome Herb, which will keep the *Bees* from returning, this is to be done if they pitch on a Bough.

IF they light on the Ground within two foot of it, ſhake 'em or bruſh 'em on the Mantle and ſet the *Hive* on the Reſts over them; if they light at any ſmall diſtance higher, you may raiſe the Mantle and Reſts with Stools, and do as before; if upon a high Tree, you muſt cut off the Bough with a ſharp Inſtrument, and covering it with a Mantle, or putting it into a large *Canvas* Bag, bring them gently down to the *Hive*; if they light on the body of a Tree, then you muſt bruſh them into a Mantle or Bag, and *Hive* them as before; if they light on the top of any thing, then muſt you ſupport the *Hive* on the top of a Prong over them and drive them upwards into it; if they fall in the middle of a Hedge, then muſt you work away the neither part of the *Hedge*, till you can come under them with your *Hive*.

IT is very difficult to move them if they get into a hollow Tree: the only Way I know of, is to ſmoke them before they are well ſettled, by which Means they will ſeek out for another reſting Place, or return to their Stock. If a Swarm parts, you muſt, as before, take one part of the Swarm into your Hive, and ſpreading your Mantle over it, carry it to the other part; then giving the Hive a gentle Shock to bring them to the bottom, ſhake the other part into your Hive, and ſet it gently on your Reſts.

After Sun ſetting that Day you have taken your Swarm, remove it to its Seat in the Bee-Garden, carrying it thither in the Mantle, diſcharge it from the Reſts at that time, and from the Mantle the next Morning. All Swarms, if the Weather be fair, will deſire to be abroad on the Morrow, and knowing their Want, having a Houſe unfurniſhed, without Proviſions, will beſtir themſelves in their Labours; but they are much diſcouraged if they are kept in by foul Weather the firſt Day, tho' they can live 5 or 6 Days without Honey, they grow weak and often Dye.

THE Means to recover a drooping Swarm is thus: The firſt Sun-ſhiny Day turn up the Hive to the Sun, that the Heat may revive them; and ſprinkle the ſides of the Hives, and alſo the Bees with a little Mead or Honey-Water; hold them in the Heat of the Sun, till you ſee many of them fly abroad, and then ſet it down.

V. *Of the Bees Enemies, and how to Deſtroy them.*

THE good Bee, as other good People, hath many Enemies, which ſhe herſelf cannot overcome

come without the Assistance of Man, for whom she labours; and therefore the wise Bee-Man will take care to destroy the Enemies of his best Friend, the Bee, whose Enemies are,

I. The *Mouse*, (whether he be of the Field or House) is a dangerous Enemy, for if he gets into the Hive, he tears down the Combs, makes Havock of the Honey, and so starves the Bees; some gnaw a Hole thro' the Top of the Hive, some keep their old Homes, and come to the Hive only for Food, and some make their Abo.d between the Hackle and the Hive.

TO prevent which, take care that your Hives be well and close wrought, for if the Straw be loose and soft, they will the easier make their Way thro' the Hive. Also take care that your Hive be close dawbed with Cloom, that they may have Entrance no where about the Skirts, but at the Door only. It is also good that ever and anon you take off the Hives, not only for this, but other Causes. A *Sampson*'s Post is very good to place near your Hives.

II. The *Wood-Pecker* and *Sparrow* are both Enemies to the Bees; the *Wood-Pecker*, with his round long Tongue, draweth out the Honey; but he doth more Mischief to *Wood Bees* than those of the Garden; the *Sparrow* devours Bees from the time of the first Breeding till the Wheat be Kerned.

III. The *Tit-Mouse* is another Enemy, of which there are three Sorts. The great *Tit-Mouse* from his black Head and Breast, is called a *Cole-Mouse*, who watches for the coming and going out of the Bees, he will stand at the Hive-Door, and never

leave knocking, until one cometh to ſee who is there, and then ſuddenly catching her, away he flies with her, and when he hath eaten her, he comes again for more, 8 or 9 will ſcarce ſerve his Turn at once; if the Door be ſhut that none comes out, he labours to remove the Bar: If that be too heavy, he falls to undermining the Door for a new Way; and when theſe Devices cannot get them out, ſome have the Skill to break the dawbed Walls of the Hives above, over-againſt the Place where they lye, and there they are ſure to have their Purpoſe. This is the greateſt Enemy the good *Bee* hath, and therefore, by the Bee Men of *Hampſhire*, he is called a *Bee biter*. The little Ruſſet *Tit-Mouſe* in the Winter feedeth only on dead *Bees*; but in the Spring he will take Part with the great Ones. The little Green *Tit-Mouſe* can only be accuſed of eating ſome few dead Bees, and and that only in ſome hungry Time.

THE *Swallow* is another *Bee*-eater, who catcheth the Bees in her Chops as ſhe flies, and that not far from the Hives, when they come laden and weary Home. The only way to deſtroy theſe Birds, is by Traps and Springs, baited with dead Bees, ſet round the Hives, or by ſhooting them with Guns.

V. THE *Hornet* being much too ſtrong for the *Bees*, is alſo a great devourer of them. Her way is to fly about the Hive, till ſhe have 'ſpy'd her Prey ſettled at the Door, and then ſuddenly ſhe taketh it in her Feet, and flies away with it, as a Kite with a Chicken. The way to deſtroy a *Hornet* muſt be very cautious, for their Stinging often cauſes a Fever; and ſome ſay leſs than Thirty will kill a Man.

VI. THE

VI. The *Waſp* is a great Enemy to the *Bees*, and more hurtful than the *Horne t*; for the *Waſps* deſtroy them is, by killing the *Mother Waſps* when they firſt come abroad, you may take them with your Flap at your *Bee* Doors, on the *Hives* when they ſit *Sunning* themſelves, and on the *Gooſe-berry* Buſhes from the beginning of *May*.

VII. The *Flying-Moth* is alſo another Enemy, he lieth between the *Hackle* and the Hive, and breedeth little *Worms*, or *Crawling-Moths*, ſome on the Skirts of the *Hives*, and ſome within on the ſtools: You are eaſily rid of theſe Gueſts, for theſe and the *Snails* are ſoon cruſhed, they are ſome of the meaneſt Enemies, and are the ſooneſt deſtroyed.

VIII. If you have any *Emmets* or *Ants* near your *Hive*, they will be a perpetual trouble to your Bees: While the Bees are ſtrong and in Health, they will fight and deſtroy the *Ants*; but when they grow weak, the *Ants* get the Maſtery of them and take poſſeſſion of the Hive. The beſt way to deſtroy this Enemy is by ſcalding them.

IX. The *Spider* is another Enemy, which harbours between the Hackle and the Hive, and you ſhall ſeldom find but that ſhe hath two or three Bees in ſtore to feed on, and ſometimes when the Bees are weak, they will be bold to enter the Hive, and there weave their fatal Web. *Aſhes* ſtrewed on the outſide of the Hive will not ſuffer the *Spider*, *Moth*, or any thing of that Nature to harbour there. And thus much for deſtroying the Bees Enemies.

VI. *Of the removing of Bees.*

IN removing of Bees, be careful to avoid the Five Evils; hindring of their Swarming, and of their Honey, gathering, breaking of their Combs, Robbing, and Loſs of Bees.

REMOVE always in a fair Day, and as near *as you can gueſs, in ſettled Weather; for when they are removed to another Place, they will fly to their old Standing as ſoon as they are let go, and hanker about for ſome Days, where, if they meet with Cold or Wet, many of them will loſe their Lives.*

THE Time of the Year for the removing of Bees, is in the Three Still Months, or within a Fortnight before or after. You muſt not remove them in Summer: You muſt never remove them in Virgo; *for the old Inhabitants of the Garden finding new Neighbours come among them, will beſure to viſit them at a Time when the chief of their Strength is ſtragling abroad, ſeeking for their old Dwelling; and they will bring the reſt ſuch Cheer to their Houſe-warming, as may make the Houſe too hot for them, and then they muſt be forc'd to go along with them, and make 'em carry their own Goods after them.*

THE fitteſt of all to remove them is in Libra. *In the Evening, when you deſign to remove, an Hour before Sun ſetting, (having firſt ſhut the Hive cloſe) immediately lift up the Stool; then having prepared another Stool of the ſame height, and cover'd it with your Mantle, ſet it in its Place; or if the old Stool*

can-

cannot well be moved, then ſet the cover'd Stool by it. This done, lift up the Stall from the old Stool, and ſet it on the New, and then wiping the Bees from the old Stool with your Bruſh, either take the Stool away, or cover it with a Cloth: within a while, when the Bees are all in, fill up the Door with Graſs, and tie the Mantle at the four Corners over the Hive, ſo that the Knots may not flip; and then bind it to the Hive about the middle ſlackly, and wreſt it faſt with a little Stick.

THE beſt way to carry your Stall is upon a Coul-Staff between two Perſons; if it be light, one may carry it in his Hand: Be ſure it be hung perpendicularly for fear of breaking the Combs, eſpecially if you happen to remove before *Libra*, when the Wax is ſoft, and the Honey is plentiful.

When you have brought the Stall home, you may let it ſtand bound as it is, all Night in the Houſe; on the Morrow, when the Weather ſerveth, ſet it on its Seat, but if foul, keep it bound 'till 'tis fair, then take away the Mantle, and Cloom it up, leaving for 3 or 4 Days a very narrow Entrance for fear of Robbing.

VII. *Of the Fruit and Profit of Bees.*

THE moſt uſual Manner of taking the Combs, is by killing the Bees, for which the Seaſon is in *Virgo*, from the end of the Dog-Days. At this time therefore, conſider with your ſelf, what Stalls you will kill: Swarms that may live are Yearlings, and two Yearlings that are in Proof, and may be kept in Store.

THOSE,

THOSE of 3 or 4 Years, which by reaſon of their ſwarming this laſt *Summer*, are full of *Bees*, moſt likely are fat, and therefore worth the taking; but they are alſo good for Store, unleſs the frequent Honey-Dews makes them over-fat; but thoſe of that Age which are caſt Hive, are not likely to continue, and therefore are to be taken, as are alſo poor Swarms not worth the feeding, all light Stocks, for they will ſurely dye. — Such alſo as they do not carry out their Droſs, and drive away their Drones in good time; alſo thoſe whom the Robbers do eaſily aſſault, are to be moſt ſuſpected; and if their *Combs* be once broken, delay not their taking. Moreover, All *Stalls* of three Years old, and upwards, that have miſs'd Swarming two Years together, and eſpecially thoſe that have lain out the Summer before, and did not caſt this laſt *Summer*, for ſuch do ſeldom proſper: It is better therefore to take 'em now they are good, than in a vain Hope of Increaſe, to kep them till they periſh.

NEITHER is it ſafe to truſt any after they have ſtood five Years and upwards, that have miſs'd ſwarming two Years together, unleſs it be ſome ſpecial ſort of *Bees*, which always keep themſelves in good Heart: ſuch as theſe I have kept 9 or 10 Years. Likewiſe if you have any that are very fat and full of Honey, as ſome Years ſome will be even down to the Stool, thoſe are ripe and ready to yield their Fruit: one ſuch Stall is worth 3 or four. Take them therefore in the ſeaſon. Take the worſt and beſt together.

HAVING made Choice of your Stalls to be taken 2 or 3 Hours before Sun ſetting, you muſt dig a Hole in the Ground (and let it be as near the Stalls as poſſibly may be) of about nine

9 Inches deep, and almoſt as wide as the Hive Skirts, laying the ſmall *Earth* round about the Brims. Then having a little ſtick ſlit in one end and ſtrip'd at the other, take a Brimſtone Match 5 or 6 Inches long, and about the bigneſs of your little Finger, and making it faſt in the *Slit*, ſtick the ſtick in the middle of the bottom, or in the ſide of the hole, ſo that the Top of the Match may ſtand even with the brim of the Pit, or within one Inch of it, and then ſet another by him dreſt after the ſame manner, if the firſt be not ſufficient. When you have fired the Matches at the upper-ends, ſet over the Hive, and preſently ſhut it cloſe at the bottom with the ſmall Earth, that none of the Smoke may come forth; ſo ſhall you have your Bees dead and down in a quarter of an Hour.

BUT a moveable Pit is much better, being always ready without any Labour, for any *Stall* in any Place of the Garden; which is to be made of round Trunk of an *Elm*, or other *Tree*, the length or depth 10 Inches of the *Concave* or hollow part, 10 at the Top, and 8 at the bottom, the *Confex Superfices* 18 Inches; and ſo the Trunk will be 5 Inches thick below, and 4 above. The Pit being placed, faſten the *Stick* with the *Matches*, in the middle of the bottom, fire the *Match* ſet over the *Stall*, and ſtop in the Smoke with Linnen Cloths —— If any Bee eſcapes he will die that Night; and you may kill them that do any harm, if you find them on the Place.

I ſhall here omit the manner of driving of Bees from one *Stall* to another, the Invention having in it much of Curioſity, and nothing of Profit in

it,

it, and whilſt ſome have endeavoured to enrich themſelves by getting the Honey, and ſaving the Bees at the ſame time, they have but made good the old Proverb, *All Covet, All Loſe:*

THERE is another way which has been try'd with Succeſs, which is called Exſection or Caſtration, which is done by cutting out part of the Combs, part being left for the Bees proviſion; but what is to be taken and what left, I find it not determined. This practice was anciently uſed in plentiful Countries, as *Greece, Sicily, Italy*, &c But however they might ſucceed in thoſe Countries, I take our Climate to be very unfit for that practice.

THE Hive being taken and Houſed, lay it ſoftly on the Ground, upon the ſides not the edges of the Combs, and loſing the ends of the Splits with your Fingers, and the edges of the Combs where they ſtick to the ſides of the Hive, with a Wooden Slice, take them out one after another. Then having wiped off the half dead Bees with a Gooſe-Feather, break the Combs preſently while they are warm into three parts The firſt Honey and Wax, the ſecond Honey and Wax with *Sandarack*, the third dry Wax without Honey, and that they may break right where you would have them, mark the place deeply with the edge of your Knife.

BUT firſt provide neceſſary *Inſtruments*, as *Pans, Knives, Tongs, Sieves*, or *Wheat-Ridders*, a *Slice*, a *Wax Grate, Knives, Straining bags*, a *Tub* or *Kive*, with a *Tap* and *Tap-Ware*, a *Hairen Canſive, Honey-Pots, Wax-Molds, Meath-Barrels.*

THESE

THESE things provided take out the firſt Combs, and ſetting the Honey in a *Ridder*, (reſting on Tongs over a clean Pan or Kiver) which will not leak, mark and break off the firſt part for Honey, and leave it there, then going to the Kive fitted with a Tap and Tap-Ware, mark and break off the ſecond part for *Meath* or *Hydromel*, leave it there, and lay aſide the third part for Wax; then taking out one and the other, do the like till the *Ridder* is full.

THAT Honey which firſt flows of it ſelf from the Combs, is called *Virgin-Honey*, tho' the Honey which comes of the firſt Years Swarm, is called by the ſame Name.

IN *Hampſhire* where there are great quantities of Bee-Gardens well ſtock'd, the Bee-Man does not take the care as is here ſet down, but takes all the Honey-Combs out of the Hive with a light Shovel, he puts all into a Tub and pounds 'em altogether, and then putting it confuſedly into a ſtrong hairen Bag, does violently preſs out all that will run, and this (having firſt its Seaſon of heat over the Fire) they put in Barrels or other Veſſels to work: This done they put what remains in the Bag into a Trough or other Veſſel, and waſh it for Meath. When the ſweetſt is all waſhed out, being cruſhed dry, the Balls they try for Wax.

THE Honey being put up warm into Pots, will in 2 or 3 days time work up a Scum of courſe Wax, Droſs and other Stuff, which muſt be taken off. Good Honey is clear, Odoriferous, Yellow like Pale Gold, Sharp, Sweet, and Pleaſant to the Taſte of Man, between thick and thin, and the beſt Honey is at the bottom.

THE

THE *Virgin Honey* is more *Chryſtalline* at firſt, and will be neither hard or white, but changeth its *Liquidity* and *Chryſtalline Clearneſs* into a *Thick Softneſs* and *Bright Yellow Colour*.

MEATH or *Hydromel* is of 2 ſorts, the weaker and the ſtronger *Meath* or *Metheglin*.

IF your *Mead* be not ſtrong enough by the Refuſe of your *Combs*, then put ſo much of your Courſe *Honey* into it, as will make it ſtrong enough to bear an *Egg* the breadth of a Two-Pence above the top of the Liquor, which is ſufficient for ordinary *Mead*, and afterwards till night, ever and anon ſtir it about the *Kive*. If you would make a greater quantity, then you muſt add a greater Meaſure of *Water* and *Honey*, Namely, ſix Gallons of *Water* to one of *Honey*; ſome will Boil this proportion of ſix to one, to four, but I think to five is very ſufficient, the Spices to this proportion are *Cinamon*, *Ginger*, *Pepper*, *Grains of Paradice*, *Cloves*, of each two Drams. The next Morning put to the Liquor ſome of the Scum of the *Honey*; ſtir them together, and ſtoop the *Kive* a little backwards, when it hath ſettled an hour or two draw it off to be Boiled; and when you ſee the Sediment appear, ſtop, and let the reſt run into ſome Veſſel by it ſelf, which, when ſettled, ſtrain into the Boiler, and the Dregs of all caſt into your Garden for the uſe of your *Bees*.

WHEN your Liquor is ſet over a gentle Fire, and a thick Scum is gathered all over, and the Bubbles by the ſides begin to break the Scum; having damp'd your Fire to ceaſe the Boil-

Boiling, Skim it clean, and then presently blow up your Fire; and when you see the Second Scum ready, having again damp'd the Fire, take off the Scum as before, and then having again stirred your Fire, let it Boil handsomely for the space of an hour, or thereabouts, but be sure you always keep Scumming of it as there is occasion.

AFTER all this is done, put in your Spices according to the former Receipt, and let it Boil a Quarter of an hour more at least: The end of Boiling is to cleanse the *Mead*, which once done, any farther Boiling does but rather diminish, than encrease the Goodness and Strength of the *Mead*.

AS soon as it hath done Boiling take it from the Fire and set it to cool; the next day when it is settled, strain it thro' a *Hair Sieve*, or *Linnen Bag*, into the *Kive*, reserving still the *Dregs* for the *Bees*, and let it stand cover'd three or four Days till it Work, and let it Work two Days, then turn it into a *Barrel* Scalded with *Bay-Leaves*, making the *Spice-bag* fast at the *Tap*; if you make no great Quantity of *Mead*, you may *Tun* it the next Day, and let it Work in the *Barrel*; your Ordinary *Mead* which turns Sour, will make excellent good *Vinegar*.

METHEGLIN is the more Generous and Stronger sort of *Hydromel*, for it beareth an Egg to the breadth of *6 d.* and is usually made of finer *Honey* with a less proportion of Water, namely of four to one. To every Barrel of 16 *Gallons* of skimmed Liquor, add *Thyme* one Ounce, *Eglantine*, *Sweet Marjoram*, of each half an Ounce, *Ginger* two Ounces, *Cinamon* one

one Ounce, Cloves and Pepper, of each half an Ounce; all groſs beaten, the one Half boiled looſe in the Liquor, and the other Half put in a Bag as before in Mead; ſo that after this Manner being made, as ordinary Mead will not keep above half a Year; this, the longer it is kept, the ſtronger it is, and hath the more Delicate Flavour and Taſte.

THIS was a Drink frequently uſed amongſt the ancient *Romans*, who, I ſuppoſe, firſt taught the ordering of Bees, and brought this wholeſome Liquor into our Iſland. We find by Hiſtory it was the approved and common Drink of our Anceſtors, even of our Kings and Queens, who, in former Ages, preferr'd the Liquors of the Product of this Iſland, before thoſe imported from Foreign Countries, as did the famous Queen *Elizabeth*, who every Year had a Veſſel of Metheglin made for her own drinking; a Receipt of which take as follows.

TAKE a Buſhel of Sweet-Bryar Leaves, as much of Thyme, half a Buſhel of Roſemary-Leaves, and a Peck of Bay-Leaves and having well waſhed them, boil 'em in a Copper of fair Water, let them boil the ſpace of half an Hour or better, and then pour out all the Water and Herbs into a Fat, and let it ſtand till it be but Milk-warm, then ſtrain the Water from the Herbs, and take to every Gallon of Water, one Gallon of the fineſt Honey, and beat it together for the ſpace of an Hour, then let it ſtand two Days, ſtirring it well twice or thrice a Day; then take the Liquor and boil it again, and skim it as long as there remains any Scum, when it is clear put it into a Fat as before, and let it ſtand to cool. You muſt then have in a readineſs a

Kive

Kive of New Ale or Beer, which as ſoon as you have emptied ſuddenly, put in the Metheglin, and let it ſtand 3 Days a Working, and then Tun it up in Barrels, tying at every Tap-Hole by a Pack-Thread, a little Bag of beaten Cloves and Mace, to the value of an Ounce. It muſt ſtand half a Year before it be drank.

AS the Vertues of Honey are tranſcendent, ſo are the Vertues of Meath and Metheglin. When old, it is a Wine moſt agreeable to the Stomach: It recovereth firſt a loſt Appetite. 2. It opens the Paſſage for the Spirit and Breath. 3. It ſofens the Bowels. 4. It is good for them that have the Cough or Tyſick. 5. If a Man take it not as his common Drink, but every now and then as Phyſick, he ſhall receive much Benefit thereby, againſt Quotidian Agues, Cachexies, and againſt all Diſeaſes of the Brain. 6. It is very good againſt the Yellow-Jaundice. 7. It is alſo a Counter-Poiſon. 8. It nouriſheth the Body, and is conſequently good againſt the Conſumption, and all emaciating Diſeaſes. 9. It is the beſt thing in the World for the prolongation of Life.

AND *Pollio Romulus* (who was a Hundred Years old) imputed the Continuance of his Health to this ſovereign Liquor, who, being asked by *Auguſtus* the Emperor, by what Means eſpecially he had preſerved that Vigour both of Mind and Body, he made no other Anſwer but,

Intus Mulſo foris Oleo.——

but by the Uſe of Metheglin inwardly, and of Oyl outwardly.

The

The ſame thing is manifeſted from the Example of the Ancient *Britains*, who have all along been addicted to *Meath* and *Metheglin*, and than whom no People in the World have more Clear, Beautiful, and Healthful Bodies; of whoſe *Metheglin*, *Lobel* writeth thus, *Cambricus ille potus Methægla, eſt alteria Liquida, & Limpida Steptentrionis Theriaca.* The Iriſh Metheglin, ſays he, *is a ſort of Liquid and clear Treacle of the* North.

AND as good and old *Metheglin* excelleth all *Wines*, as well in Pleaſantneſs of Taſte as for Health, ſo being burnt it is *better* than any burnt *Wine* for comforting and ſettling a Weak and Sick Stomach. The manner of burning of which being not common in this Age, I ſhall ſet down the Method thereof. *Set* over the Fire a deep Pot or Kettle almoſt full of Water, when it boileth, put in a Pewter Pot full of *Metheglin*, before that beginneth to boil skim it, and put in *two* or *three* bruiſed *Cloves*, and a Branch of *Roſemary*, then beat the Yolk of an *Egg* in a Spoonful of cold *Meath*, and ſtir *them* together, then put to that a Spoonful of hot *Meath*, and after that another, always beating them together; and then by degrees pour it into the Pot ſtirring it continually, then as ſoon as it boileth, take up the Pot and pour it into a warm Pot of the like bigneſs, firing it as it runneth, and ſo let it burn as long as it will. A *Metheglin Poſſet* is of the like Vertue.

THE manner of ordering the *Wax*, is as followeth: Take the *Wax* and *Droſs*, and ſet it over the Fire in a *Kettle* or *Caldron*, that may eaſily contain it; then pour in ſo much Water as will make the Wax ſwim that it may boil with-

without burning; and for this Reaſon, while it is boiling gently over the Fire, ſtir it often; when it is thoroughly melted, take it off the Fire, and preſently pour it out of the *Kettle* into a *Strainer* of fine thin Linnen, or of twiſted Hair, ready placed upon a *Screw* or *Preſs*; lay on the Cover, and preſs out the Liquor (as long as any *Wax* comes) into a *Kiver* of cold Water; but firſt wet both the *Bag* and the *Preſs* to keep the *Wax* from ſticking; at the firſt cometh moſt *Water*, at the laſt moſt *Droſs*, and in the middle moſt *Wax*.

THE *Wax* growing hard, make it into balls, ſqueezing out the Water with your Hand. When you have thus done, break all the balls into Crumblets, and in a *Skillet* or *Kettle* ſet it over a ſoft Fire; while it is melting ſtir it and skim it with a Spoon wet in cold Water, and as ſoon as it is melted and skimmed clean, take it off. And having provided the Mold, firſt warm the bottom, eſpecially if the Cake be ſmall, and beſmear the ſides with Honey, and then inſtantly pour it gently till you ſee the *Droſs* come, which ſtrain into ſome other Mold by it ſelf; and when it is cold, either Try it again, or having pared away the bottom, keep it as it is for ſome uſe or other.

WHEN the *Wax* is in the Mold, if there be any *Froth* yet remaining on the top, blow it together at one ſide, and skim it off lightly with a wet *Spoon*.

THIS done, ſet not the Cake abroad where it may cool too haſtily, but put it in a warm Houſe not too far from the Fire, and, if it be a large Cake, cover it over warm, to keep the top

top from cooling, till the inward heat be allay'd and ſo let it ſtand, not moving the Mold till the Cake be cold; if it ſtick, little warming of the Veſſel or Mold will looſen it, ſo that it will preſently ſlip out.

THE Tokens or Properties of good *Wax* according to *Sylv. de med. Simp. delect. lib.* 1. *Cera ſit Flaviſſima, odarata, Pinguis Coacta, Levis, Pura & Aliena omni materia carens.* i. e. *Good* Wax *is Yellow, Odoriferous or Sweet, Fat, Faſt or Cloſe, Light, Pure and void of any other matter.* That which is moſt Light and Yellow, fartheſt from Red, and neareſt to White; for as in Gold, the deepeſt, ſo in *Wax* and Honey the paleſt Yellow is beſt; yea, the pure Virgin's Wax, at firſt, is White: Wax muſt not be hollow, as is the Froth, for Wax, like Oyl, is beſt in the Top, as Honey is in the Bottom; and therefore the Bottom, into which Droſs does deſcend, is not good.

HAVING thus given Directions for Working of the Wax, I have ſhewn all the Profit of the Induſtrious Bee, who like a good Common-Wealth's-Man, works for the Good of others, tho ſhe loſeth her Life in the Enterpriſe. The Honey, the Meath, Metheglin and Wax, are all of them as good Commodities as any, but the Wax more eſpecially, it being full as good as the choice Metal of its own Colour: It is always a Ready-Money Commodity in *London*, eſpecially *Engliſh* Wax, which generally ſells at *London* betwixt five and ſix Pounds *per* Hundred Weight, when Foreign Wax will not yield near that Price.

BUT as I have given you an Account of the noble and generous Wines preſſed from the Bee-

Vine-

Vine-Yards, and their Vertues, I ſhall give you a ſhort Account of the Vertues of their Wax.

WAX hath no fixed Elementary Quality, but is a mean between hot and cold, and between dry and moiſt. It mollifies the Sinews, it ripeneth and reſolveth Ulcers; the Quantity of a Pea of Wax being Swallowed down by Nurſes diſſolveth the Milk curdled in their Breaſts, and ten round pieces of Wax, of the bigneſs of the Grains of *Millet* or *Hemp-Seed*, will not ſuffer the Milk to curdle in the Stomach. Moreover, it maketh the moſt Excellent Light, for Clearneſs, and Sweetneſs, and Neatneſs, to be preferred before all others, and is ſuch as is uſed in the Palaces of Kings and Princes.

THIS Yellow Wax is by Art (for certain purpoſes) turn'd into divers Colours as White, Red and Green, the doing of which is known to all.

AND ſuch is Wax in its Kinds, both Natural and Artificial. Natural Wax is alter'd by Diſtilation into an Oyl of marvellous Vertue, it is rather a Celeſtial or Divine Medicine, than Humane, becauſe in Wounds it worketh Miracles, and therefore oppoſed by the Surgeons, though they uſe it themſelves; for it healeth a Wound, be it never ſo wide and big, being before ſtitch'd up, in 10 or 12 Days, at the moſt; but it healeth thoſe that are ſmall in 3 or 4 Days, by only anointing the Wound therewith, and applying a Cloth wet in the ſame. It ſtayeth the ſhedding of the Hair either on the Head or Face, by anointing therewith.

FOR

FOR inward Diſeaſes this Oyl worketh Miracles. If you give 1 Dram at a time in *White-Wine*, it will provoke *Urine*, helps *Stiches* and *Pains* in the *Loins*, the cold *Gout*, and all other Griefs coming of Cold.

THE manner of making this Oyl is as follows. Take of pure new Yellow *Wax* as much as will fill half your *Retort* or body of *Glaſs*; melt it on the Fire, and then pour it into ſweet *Wine*, wherein let it Soak; waſh it often, and wring it between your hands, then melt it again, and pour it into freſh *Wine*, and order it as before; this done ſeven times, every time putting it into freſh Wine, then add to every Pound of Wax four Ounces of the Powder of *Red-brick* finely bruiſed, put it altogether in your *Retort* or *Glaſs* well Luted; then ſet the *Retort* in an *Earthen Pot*, filling it round about and beneath with fine Sifted *Aſhes* or *Sand*, and ſet the Pot with the *Body* in it, on a *Furnace*, and ſo diſtil it with a ſoft Fire, and there will come forth a fair Yellow Oyl, which will congeal in the Receiver like Pap when it is cold, if you ſhould rectifie this Oyl by often Diſtilling, it would be too hot, and not fit for uſe. It is marvellous to behold, at the coming away of this Oyl, all the four *Elements*, the *Fire*, *Air*, *Water*, and *Earth*, at one and the ſame time in the Receiver.

SUCH is the Vertue of *Wax*, both in its kind, and altered by Diſtillation; it is alſo the Ground of all *Cere-Cloths* and *Salves*: The *Balm* helpeth to Cure all your inward and outward Diſeaſes, and is the beſt little Friend a Man has in the World.

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HAVING gone thro' the Vertues of *Wax*, *Meath*, and *Metheglin*, I ſhall conclude this Treatiſe with the Vertues of Honey, which, indeed, are many and Extraordinary.

HONEY is hot and dry, in the ſecond Degree, it is of ſubtil parts, and therefore doth pierce as Oyl, and eaſily paſſeth the parts of the Body; it hath a power to cleanſe, and ſome ſharpneſs withal; and therefore it openeth Obſtructions, and cleareth the Breaſt and Lights of thoſe Humours which fall from the Head; it looſeth the Belly, purgeth the foulneſs of the Body, and provoketh Urine: It cureth and bringeth away Phlegmatick Matter, and ſharpneth the Stomach of thoſe, who by reaſon thereof, have but little Appetite. It purgeth thoſe things which hurt the clearneſs of the Eyes, it nouriſhes very much and breedeth good Blood; it ſtirreth up natural Heat, and prolongeth Life and Old Age; it keepeth all things uncorrupt which are put into it; and therefore Phyſicians do temper therewith all ſuch Medicines as they deſign to keep long; yea, the Bodies of the Dead being Embalmed with Honey, have been preſerved from Putrifaction. It is a ſovereign Medicament both for outward and inward Maladies. It helpeth the Grief of the Jaws, the Kernels growing within the Mouth, and the Squinancy or Inflammation of the Muſcle of the inward Gargil; for which purpoſe it is gargarized, and the Mouth waſhed therewith. It is drank againſt the biting of a Serpent, or a mad Dog. It is good for ſuch as have eaten Muſhrooms, or have drank Poppies, againſt which Evil, the Honey of Roſes is taken warm.

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IT is also good for the *Falling-Sickness*, and better than Wine, because it cannot arise to the Head, as Wine doth. It is a Remedy against the *Surfeit*; for they that are skilful in Physick, when they perceive any Man's Stomach to be overcome, they first ease it by Vomit, and then (to settle the Brain and to stay the Noisome Fume from ascending unto the Head) they give the patient Honey upon Bread. In respect of which great Vertues, the right Composition of those great Antidotes, *Treacle* and *Methridate*, altho they consist, the one of more than 50, and the other of more than 60 Ingredients, require thrice so much Honey as of all the rest; all which Premises considered, 'tis no wonder the Wise King, who knew the Vertues of all Vegetables and Drugs, said, *My Son, eat Honey, for it is good*, Prov. 24. 13. The *Holy Land* is often, and much commended for flowing therewith; and the Eternal *Emanuel* did eat it for his Food. *Isa.* 7. 15. *Luke* 24. 43. Honey, if it be Pure and Fine, is good in it self, even for those Squeamish Stomachs which are against it. But indeed the vulgar Honey may be disliked, as being Sluttishly handled, and much corrupted with stopping, and Bees both Young and Old, and some with other Mixtures also.

HONEY is most fit for old Men, Women, and Children, for such as are Rheumatick and Phlegmatick, and for all generally that are of a cold Constitution; for Young Men, and those of a hot Nature, it is easily turned into Choler, and other ill Humours; and yet *Lobel* saith, —— *That Honey, taken fasting, doth much good to such as have hot Livers*: And seemeth to say, *That our Honey is hurtful to none, because*

because it purgeth that Humour, which other Honey, in some Houses, is thought to breed. All Honey, immoderately taken, causeth Obstructions, contrary to its natural Quality, and so in time breedeth the Scab.

RAW Honey doth more loosen the Belly, causeth the Cough, and filleth the Entrails with Wind, especially if it be of the courser Sort. Being boiled, it is more Nourishing, lighter of Digestion, and less Laxative, as also less sharp; for which Reason they use it to knit together hollow and crooked Ulcers, and to close other disjoynted Flesh. It is also good against the Pleurisy, the Tyssick, and other Diseases of the Lungs.

HONEY is Clarified by boiling, and that either by it self, or with a fourth Part of Water, or other Liquor. But always in boiling skim it, that it may be clear.

BY it self you must boil it, till it will yield no more Scum (which will be about half an Hour) and that with a very soft Fire, or in a double Vessel, lest by over-heating, it gets a bitter Taste, and lest it suddenly run over and Flame.

IT must be boiled with Water an Hour at the least, even until the Water be evaporated, which may be known by the Bubbles that rise from the bottom; then to make it fine, put to every Pound of Honey the White of an Egg, and afterwards skim it again in the boiling. Towards the end of the boiling, you must slacken your Fire, for the Honey is apt to be set on Fire, and to become bitter by too vehement a Heat.

WHEN your Honey is boiled enough, take it from the Fire, and that rather too ſoon than too late; for if here be any Droſs remaining, you ſhall find it on the Top when it is cold, but over-much Boiling conſumeth the ſpirituous Part of the Honey, and turneth the ſweet Taſte into a Bitter.

CHAP.

THE *Angler's Guide.*

CHAP. I.

Inſtructions for ordering of Fiſh-Ponds, and for the Encreaſe and Breeding of CARP, and other Fiſh.

IT is unknown but to ſuch as have made Tryal, what a great Profit may be made by Breeding of *Carp*, eſpecially near the City of *London*, or within reach of an Eminent City or Town in *England*, Inhabited by the Nobility or Gentry; the Pond for the *Carp* is no great Charge in making, the Stocking of it with Fiſh much leſs; and the looking after it no Charge at all, it being only the Expence of idle Hours.

AS for the Scituation of the Pond, we will ſuppoſe it near *London*, on the River of Thames: Let your Pond be of an Acre of Land, Planted with Willows in different places, but not all round it. Let it not be in every Place of an equal depth, but in ſome Places deeper than in other, that the Fiſh may lie there, and keep themſelves warm in hard Winters. Make an Aqueduct, either by an Arch, or by Wooden or *Leaden Pipes*, to convey the Water from the Thames into your Pond, ſo that the *Tide* may Ebb and Flow in your Pond, as it does in the River. By this means you may have a Breed of *Carps*, the ſame of thoſe of the River, ſo much applauded by curious Palates; and if you put a quantity of the *Thames* Flounders (which are now killed ſo very ſmall) into theſe ponds, they will certainly thrive and grow to a large Size.

THE Male *Carp* muſt be three or four Years Old; and to every Female you muſt put in three or more Males.

A Pond of an Acre will feed every Year 200 *Carps* of three Years old, 300 of two Years old, and 400 of one Years old.

IF you have a deſign to make them very fat, and grow very large, you may remove them from your Ponds, and put them into Pits and Puddles in Paſtures, or into deep Ditches in Meadows; where, by a ſhort continuance, they will grow to a great bigneſs.

YOU muſt draw your Pond about *Alholland-Tide*; you muſt kill all that are above three Years old except the Breeding Females, then put

put the reſt that are three Years, two Years, and one Year old, into the Pond, as many of them as it will feed. This muſt be done every Year; and conſtant Care muſt be taken to keep the Females in ſufficient Number for Breeding, for the Females ſometimes will dye ſoon after they have Spawn'd. The Female muſt never be kill'd, but be kept from Year to Year, and a Female well kept will be in Heart 40 or 50 Years.

THERE is no Part of the Kingdom free from Thieves; there are Poachers for Fiſh, as well as for Hares and Conies, and therefore you muſt take care of thoſe People, for if they draw your Ponds, they will make no Diſtinction between Males and Females, betwixt Breeders and Store-Fiſh; they'll take 'em as they riſe, for they are all clear Profit to them.

THE Method of Staking Ponds will not do in this Caſe, where Men make a Profit of breeding Fiſh. The Stakes will hinder the Thieves from drawing your Ponds, and it will hinder you alſo, who muſt be able to come at your Fiſh as Occaſion ſhall require.

PONDS are generally Staked by Gentlemen who breed Fiſh only for the Diverſion of the Angle, and they know where-abouts the Stakes are, and how to dip their Lines clear of them.

BUT the beſt Way to preſerve your *Carps*, is to make Home-Ponds pretty deep, and bring 'em near your Houſe at Winter. You may put five or ſix Hundred *Carps* in a Pond of twelve Feet ſquare, where they will lye warm in the coldeſt Winter; and as they love good Harbour, it will be neceſſary to caſt the Trunks of hollow Trees on the Roots of them, into your Pond.

THE ſame Order alſo may be obſerved in Ponds for other ſorts of Fiſh, only they are not to be removed. In your Ponds for *Pike* and *Jacks*, you muſt put in *Roach* and *Dace*, on which the *Pike* will feed: The largeſt *Roach*, which are grown too big for the Prey, will be of good Profit in the Market, eſpecially thoſe bred in the Ponds near the *Thames*, into which the Tide flows.

YOU may alſo put *Pearch* into thoſe Ponds, which are a profitable Fiſh, and on which the *Pike* cannot feed, by reaſon the *Pearch* have Prickles on their Heads, Backs, and Fins, which hinders the *Pikes* from Gorging them.

CHAP. II.

Some particular Obſervations relating to Fiſh-Ponds, and for the Encreaſe of Fiſh; with Directions for young Anglers, teaching them the beſt Method of catching Trout, Carp, Barbel, Jacks, *and* Pikes; Perch, Roch, Dace, &c. *As alſo how to Dreſs them after the neweſt Faſhion.*

IT is Natural for all Men to praiſe ſuch Diverſion moſt, which he loves beſt: Some extol Hunting, ſome Fowling; ſome one thing, ſome another. But as my chief Delight is in *Angling*, ſo I ſhall proceed to treat conciſely on that innocent Diverſion, in ſeveral of its material Branches. *Angling* for Jacks, Pikes, and Trout, is certainly very healthful, becauſe the Body is always in Motion; whereas they who endeavour to catch Barble, Carp, Roch, Dace, &c must lead a ſedentary Life, which needs muſt be prejudicial to their Conſtitution, if they continue long at it. However, as ſome are pleaſed with that Kind of Diverſion, I ſhall lay down ſome Rules, which, if obſerved, may be advantageous to thoſe Sportſmen who are pleaſed to take ſuch ſort of Fiſh.

Directions for making a Pond for TROUT.

I am not inſenſible that many People are of Opinion, that a Trout will not live in any kind of Ponds; but I think that Experience ought not to give place to any ſilly ſpecious Suggeſtion, or verbal Aſſertion. I have ſeen as large well-fed Trouts taken out of a Pond, in which they were bred, as I have met with in Rivers; the former being as firm and well-taſted as the latter: therefore they who are curious that Way, may furniſh their Tables with this ſort of Fiſh, and have them ready at half an Hour's warning.

THE Method of making the Pond is as follows; Chuſe a Gravelly Bottom (for Mud and Slime are Poiſon to Trouts) near a River or Brook, and let it be dug four, five, or ſix foot deep, and about twenty broad. On the Sides plant Hay, which will not only afford your Fiſh a Shade from the ſcorching Rays of the Sun, but will alſo adminiſter Food to them, by the Seed falling into the Water. And indeed, if you throw in one or two large Boughs of Trees, with all their Branches, it will be of great advantage to the Trouts. The River-Water muſt either be brought to run conſtantly into your Pond by a Cannal, or Pipes of Wood or Lead, and where it enters your Pond, you muſt place a Wheel, after the manner of an Over-ſhot-Mill, which, being conſtantly in motion, will prevent the Trouts from leaping into the Stream, and eſcaping from you. At the End of the Pond, you muſt have an Out-let for the Water, which is no other than a *Sluice* with Holes in it of ſuch a ſize, as may prevent the young Fry from paſſing

paſſing through. In a Pond, above mentioned, you may put forty or fifty Brace of Trouts from ten Inches in length to what ſize you think fit, and if you caſt in ſome *Minow's* or Gudgeon they will contribute to fatten and encreaſe the Bulk of the Trouts; for they love to feed upon them.

How to Angle for TROUTS.

TROUTS are to be taken by the Hook either at the Top or Surface of the Water or elſe at the Bottom: therefore for the former, you muſt provide your ſelf with a good Rod very taper and pliable, and ſo alſo your Line muſt be, and about two Yards longer than your Rod. They will riſe at artificial Flies, the beſt way to know how to humour their Pallates is to beat a Buſh that hangs over the River, and when the living Flies drop into the Water, take up one of them, and obſerve the Colour of it's Wings and Body, which you muſt match as near as you can with an artificial Fly. Being thus prepared caſt your Line, but let as little of it (as poſſible) touch the Water leſt you frighten the Fiſh from it: then draw it gently towards you having a ſtrict Eye on your Hook, and as ſoon as a Trout riſes, ſtrike tenderly leſt you break your Line. If you perceive that you have him faſt, humour him and let him run which way he will, ſtill keeping him under the Bending of your Rod, otherwiſe if he throws himſelf out of the Water, as a large Trout will frequently do, it is ten to one but he breaks your Line. A large black artificial is good when the Wind is high, and the Sky clear but when it blows hard, and the Weather cloudy a reddiſh Colour Fly is proper. The May Fly which

which you will find on the Bodies of Trees in that Month and alſo in *June*, is a killing Bait for a Trout; but then you muſt be equipt with a ſhort Line and a bare Hook: run the point of your Hook along the back of the Fly till it comes to the Head, and then ſhaking it a little about a Foot diſtant from the Top of the Water, let it fall lightly down, ſo that it may not ſink, and if there be a Trout within ſight of it, he will endeavour to take it. The Head of a Stream is the likelieſt place for a Trout, and next to that the Sides. A *Minow* or ſmall *Gudgeon* are tempting Baits: You muſt Hook them at the Noſe or (as ſome will rather chuſe) under the Back-Fin, and faſtening a Grain or two of Shot upon your Line about ten Inches from the Hook, let your Bait ſwim which Way he will; if you perceive that the Trout has taken the *Minow*, you muſt not check him, but in the ſpace of a Minute you may ſtrike him. It would be very proper to have a *Landing-Net* in readineſs, leſt your Line ſhould not be ſtrong enough to weigh your Fiſh out of the Water, or leſt his Bulk might occaſion him to break his Hold.

IF you intend to Angle at bottom, you muſt furniſh your ſelf with *Brandlins*, or ſmall Red-Worms well ſcoured in Moſs; or elſe with a *Cadus*, or Cod-Bait, which is a Maggot that grows in hollow Bits of Stick, and are found in Ditches ſticking to the Graſs or Weeds. The *Cadus* is an Excellent Bait at all Times, but more particularly when the Water begins to be diſcoloured, and the River ſwells after a hard Rain. You ſhould furniſh your ſelf with ſeveral Lines of ſeveral Sorts; and as Angling at bottom makes a Man liable to have his Hook faſtened

faſtened to a Stump, Stone, or Weed; you ſhould alſo provide your ſelf with a *Lead-Ring*, to which a piece of ſmall Cord, in length four of five Yards, muſt be tied, then putting it over the Butt-end of your Rod, let it run down gently to the bottom, and by falling on the Hook, it's Weight will clear it.

THERE is another Bait for a Trout, which through Ignorance, many even of the old Anglers never uſed, and it is called a *Gentill*; this is no other than a Maggot bred from a Bullock's Liver, or found among old Tallow, or elſe proceeding from a dead Dog, Cat, or Sheep; the former ſort is beſt. Theſe muſt be purged by keeping them a while either in Bran, or Sand a little moiſtened, before you uſe them.

Directions for CARP-fiſhing.

YOUR Rod muſt be ſomewhat ſtronger than that with which you Fiſh for Trouts, and your Line muſt be proportionable to your Rod in ſtrength; for a *Carp* will ſtruggle hard for his Life, and is not ſo eaſy to be managed as other Fiſh of an equal ſize. Your Hook ought to be made of ſtrong Wire narrow in the Bending, with a clear Beard and ſharp Point. The uſual Baits are either *Lob-Worms*, or elſe Paſte, the Paſte is thus made. Take ſome of the beſt Flower, or the crummy Part of the fineſt white Bread, temper it with a little *Brandy*, and mix ſome white *Honey* with it, then tincture it with *Vermillion* by degrees, till it comes to be of a pure Fleſh Colour working them all together in your Hand, and not ſuffering any Streaks of the *Vermillion* to be ſeen in it. Keep it for uſe in a little Box, and as it grows dry, moiſten it either with Brandy or Water, or with both mixt together, leſt it ſmells too ſtrong of the Brandy.

BEING

BEING thus furniſhed, you may ſet out for your Sport, and if you chuſe to Angle in a Pond, do not approach near the Sides, but keep at a due diſtance. You will ſeldom meet with any *Carp* in the Middle of the Pond, therefore you muſt lay your Bait in the Water near the Edges, where they ſwim about in expectation of Food. And indeed, if you would ſecure good Fiſh, and have much Diverſion, you ſhould caſt in Handfuls of Worms, Grains, *&c.* into thoſe Holes, or other Places, where you deſign to drop your Line, for ſeveral Days before you intend to Angle, and even when you are at the Sport: For by purſuing this Method, you will draw the Fiſh to ſuch particular Places as you deſire, and they will conſtantly viſit thoſe Places in hopes of finding ſuch Nouriſhment there, as they had before.

THE ſame Method ought to be uſed in Rivers, and I have known above twenty Pecks of good Red-Worms to be thrown into one Hole in a Seaſon; which was ſo far from cloying the *Carp*, that many being gather'd thither, they ſeemed to ſtrive, which of them ſhould be moſt eager in taking the Bait.

WHEN you come to the River-ſide, faſten your Plummet on your Hook, and obſerve the Depth of the Water; you muſt have a Float on your Line either of *Cork*, or elſe a large *Swan's Quill*, with Lead enough to poiſe it in the Water. Obſerve to take the Depth of the Water ſo nicely, that when your Float lies upon the Surface, the Lead (which muſt be placed ten Inches from the Hook) muſt bear on the Ground. A *Carp* is a Fiſh that delights to be near his Harbour,

Harbour, therefore you muſt expect to find him either under the Cover of a Tree, or near ſome old Stump in the Water. A River *Carp* is preferable to a Brace of thoſe that are Ponds, and more difficult to be caught; you muſt therefore be very Nice in your Angling. If you Bait your Hook with Paſte, put as much on it as will cover the crooked Part, and drop it into the Water tenderly; if you bait with a *Lob-Worm*, one at a time is ſufficient, and do not draw too much of the Worm on your Hook, but let a third Part remain untouch'd, that ſo the Fiſh may ſuck it in by degrees before he can be apprehenſive of the Hook. When you perceive your Float to move, eaſe out your Line, till you think the *Carp* has drawn you with him for the length of half a Yard; and then if he continues to give you Signs that he has quitted you, ſtrike pretty hard, and if you perceive that he is faſt, hold him tight to it, leſt he entangles your Line about a Stump; for as ſoon as he feels the Hook in his Mouth, he will endeavour to get into his Harbour, and if you ſuffer him to do that, you will certainly loſe him. When you have brought him into clear Water, you muſt manage him as you do a *Trout*, with this Caution however, that as he is very head-ſtong, you muſt not pretend to turn him, till you find he is almoſt tired. When you Angle with Paſte, make ſome of it into little Balls as big as Peaſe, and caſt a Dozen of them (one by one) into the Water, ſo that they may ſink near your Hook: And ſo in like manner, if a Worm be your Bait, take ſome of them and divide them into three Parts, and caſt them into the River. Continue to do this once in your Angling.

THERE are very few Hair-Lines, but what are either too weak, or if ſtrong enough, too clumſey to Angle for *Carp* in a River; beſides, a Silk-Line is cheaper and more ſerviceable. Remember when you have ended your Diverſion, not to put up your Silk-Line, till it be throughly dry; for if you do, it will quickly be rotten. And obſerve, That whether you Angle for *Carp*, *Trout*, *Barbel*, &c. it will be requiſite to have a Net with two Hoops to it, in which you may keep your Fiſh alive as long as you pleaſe.

Directions for BARBEL *Fiſhing.*

A *Barbel* is accounted a very courſe Fiſh, and they being more plentiful than *Carp*, is one Reaſon why they are ſo much deſpiſed. But if we ſearch into the Nature of them both, we ſhall ſoon perceive that the Fleſh of the *Barbel* is finer than that of the *Carp*; for the more Boney a Fiſh is, the courſer it will prove. And indeed, if you would Dreſs a *Barbel Carp* Faſhion, allowing the ſame Sauce to one and the other, I am apt to imagin, many wou'd approve that Fiſh which they now deſpiſe. I have known the niceſt Palates deceived with a *Chub*, when ſerved up with rich Sauce, and heard them declare that they never taſted finer *Carp*. —— But no more of this.

THE Rods and Lines for *Barbel*-Fiſhing, muſt be more ſubſtantial than thoſe which are uſed in killing a *Carp*; becauſe a *Barbel* is a much ſtronger Fiſh, and much heavier: And in Angling for theſe, your Hook muſt be ſomewhat ſtronger. The only Bait uſed to catch theſe, are the ſame ſort of Worms with which you fiſh, for

for *Carp*, and the Holes where they harbour muſt be prepared after the ſame Method as for *Carp*-Fiſhing. You need not try the Depth of the Water, for you muſt lye on the Bottom, nor uſe a Float. Your Lead muſt be proportion'd in Weight to the Current of the Water, and it muſt alſo be flat, that it may lye ſteddy, having a Hole through it, that it may be taken from your Line at pleaſure; and to prevent it falling upon your Hook, you may put a large Shot on your Line twelve Inches diſtant from the Hook. Now ſince you cannot foretel how large a *Barbel* may come to your Hook (for I have ſeen ſome which have been taken from one Pound to thirty) it is neceſſary to be provided for the largeſt; and the rather, becauſe as you muſt Humour them for a while, and many Obſtacles may be in your Way, which will impede your following them, Loop your Rod all along with Braſs Wire, and let your Line run thro' every Loop, and at the But-end of your Rod you ſhould have a Wheel or Wince affix'd. Then wind your Line about the Wince, ſo that if the *Barbel* be too Head-ſtrong, and you cannot preſently turn him, or if you are hinder'd from following him, you may give him Line enough, which ought to be thirty Yards long. And as you find him to return, you muſt be nimble in winding up your Line, leſt he entangles you, and ſo makes his Eſcape; and remember to keep him from the Shore (to which Place he will ſtrive to come when he begins to be tired) by rendering your Line ſhort, and ſtretching out your Rod. For he will puſh for the Buſhes and Stumps of Trees, expecting to find ſome Succour from them; and if he gets there, you will find it very difficult to recover him.

How to catch PIKE *and* JACKS.

THERE are very few People who do not admire a *Jack* or *Pike*, they are the ſame Fiſh, but differ in their Names, according to their Age or Size; and indeed their Fleſh is ſo very firm, fleaky, and well-taſted, that it muſt be acceptable to the niceſt Palate. A *Pike* is called the Tyrant of the Freſh-Water, and is ſo very Voracious, that he ſpares not his own Kind, the Greater always preying upon the Leſs with as keen an Appetite, as if he had ſeized any other Fiſh. He has no other Enemy (Mankind excepted) but the *Otter*, which is an amphibious Animal, living as well by Land as Water; and I happen'd to be in Company one Day with ſome Gentlemen who were Fiſhing, when to our great Surprize, we ſaw at a ſmall diſtance, two Animals, which were devouring their Prey; being aware of us, they leapt into the River, and then we approached, and found what Work they had been at. It may ſeem improbable to ſome, but I beg the Reader to be aſſured, that what I here relate is true. The *Otters* had left behind the Remainder of a *Pike*, which, if we may conclude from the Dimenſions of his Jaws, and part of his Tail, could be no leſs than four Foot in length: The Head of this *Pike* is now to be ſeen at one of the Gentlemen's Houſes in *Surry*. The ſame Day a neighbouring Gentleman took with his Caſting-Net a *Pike* about thirty-ſix Inches long, who had devoured another of fifteen Inches, part of which hung out of his Mouth.

IF you have a mind to feed or breed *Jacks* in your Pond, you muſt have one made on purpoſe for them, which muſt be ſupply'd with ſmall

ſmall Fiſh to ſupport them, or with Worms, *&c.* A *Jack* delights to lye under a Stump, Tree, or Weeds, and generally near ſome little Stream; and Two Reaſons are aſſigned why they chuſe ſuch a Scituation, *viz.* to ſecure them from the Heat of the Sun-Beams; and alſo that by lurking in ſuch convenient Places, they can the better ſhoot forth upon their unwary Prey.

THERE are three Ways to catch *Jacks* with a Rod, *viz Snaring*, *Trowling*, and *Snapping*.

WHEN a *Jack* has filled his Pouch, he will chuſe to bask himſelf in the Sun near the Bank-ſide, and he is ſo ſtupid at that Time, or ſo delighted with the Sun's Influence, that a ſmall Matter will not terrify him. Therefore, if you faſten a Wire at the Top of your Rod, or to a ſtrong Pole, and make it Nooze-faſhion, (the Nooze being ſomewhat large in the Circumference) and drop it gently into the VVater about four or five Yards above him, it will be Ten to One but you may take him. For by drawing it gently down the Stream till it comes over his Head, and reaches about the middle of him (which he will not regard, if due Care be taken) you may give it a ſudden Jirk, and the more he ſtruggles, the cloſer his Strivings will draw the fatal Snare to him. So that if your Rod or Pole be ſtrong enough, it is impoſſible that he ſhould eſcape: And in the ſame Manner you may take *Trout*, *Barble*, and other Fiſh.

TROWLING is allowed, by all Sportſmen, to be the faireſt Way of taking *Jacks*, and is thus performed. Being equipt with a Rod or Pole ſix Foot in length (tho' ſome will have them to be ſeven, eight, or ten, which will be very troubleſome,

ſome, and only tire your Arm, you muſt faſten your Ring to the Top of your Rod, which Ring is made of Iron or Horn, but the latter is preferable upon many Accounts, too tedious to be here inſerted. Then take your Fiſhing-Needle, and putting it into the Mouth of your Gudgeon, ſmall Roch or Dace, thruſt the Point of it out at the Tail, and cut off the Tail-Fin. Then take your Trowling-Hook, and ſlip the Eye of the Wire upon the Notch at the End of the Needle, and draw it through the Fiſh, burying the Lead of it in his Body: This being done, ſow up the Mouth of your Bait, and let the Point of the Hook be cloſe by the Fiſh's Eye, on the ſide of his Head; you muſt alſo ſecure the Gills of the Fiſh with your Needle and Thread; and laſtly, tying the Tail, faſten the Thread to the Loop of your Wire. Having proceeded ſo far, and a Loop being made to the End of the Line, and a Swivel to it, put it thro' the Ring, and place the Wire of the Hook upon the Swivel. Your Line is to be wound round your Reel made for that purpoſe, through the Ring of which you put your Thumb, and hold it faſt. Then take off ſix or eight Yards of your Line, which you muſt take up in Ringlets with your Left-Hand, and then by directing your Bait with your Rod in your Right-Hand, caſt it from you, and when you believe it has reach'd the bottom, draw in your Line by degrees, taking it up in Ringlets, as it was before you caſt it from you.

IN *Trowling* for *Jacks*, obſerve, That when you come to the Water-ſide, to caſt your Bait firſt under the Bank where you ſtand, then on each Hand of you, and laſtly, out into the River, where you think moſt proper: For, if you do not *Trowl Home*, (as the Fiſhermen term

term it) but being to caſt your Bait far from you, you may by this Method frighten the *Jack* which lyes under the Bank on which you ſtand, and prevent him from Feeding.

YOU will quickly perceive if a *Jack* takes you in *Trowling*, for he will either give a little Jirk, and then you muſt eaſe out your Line, till you find that he is at Reſt; or if he be greedy and a large Fiſh, he will run away with as much Line at once, as perhaps you have in Ringlets upon your Left-Hand. Allow your *Jack* a quarter of an Hour to *Pouch* his Prey; for as he ſeizes it in the middle, and keeps it croſs his Mouth, till he gets to his Harbour, or ſome ſtill, quiet Place; ſo if you were to draw your Line haſtily, you would check your Fiſh and not Wound him. Therefore allow him enough, for as ſoon as he thinks fit, and not before, he will ſpew out the Bait, and then catching it again in his Mouth Head foremoſt, he will *Pouch* it. While he is doing this, you may take your Landing-Hook, and ſcrew it either into the End of your Trowling-Rod, or elſe into a ſtrong Stick for that purpoſe. If you think you have allowed the *Jack* Time enough, or if he begins to run after he has reſted a-while (for ſome *Pouch* their Prey much ſooner than others) then gather up your Line gently till you feel your Fiſh, and give him a hard Jirk with your Rod. If you perceive that he ſtruggles hard, let him have Line enough, but remember not to ſlacken your Line, and yet you muſt not humour him that Way, if there be any Trees or Buſhes near him, for he will entangle you in them, and you'll not only loſe him but part of your Line. When he's tired, and brought near the Bank, pnt your Landing-Hook into his Gills, and lift him up.

How to Snap for JACKS.

THE ſame Rod, with which you Angle for *Barbel*, will ſerve for *Snapping*; and I have taken good Trout and large *Perch* this Way. Your Bait muſt be a live *Gudgeon*, *Roch*, or *Dace*, which you muſt faſten under the *Back-Fin* upon the little Hook of your *Snapp*, and at two Foot diſtance you muſt have a Float made out of a large *Cork*, and ſo drop your Bait into the Water, and let it ſwim with the Stream. It would be needleſs to deſcribe the Shape and faſhion of the *Snap-Hooks*, becauſe you may buy them ready made, I ſhall therefore proceed to give ſuch Directions as are neceſſary. Your live Bait muſt be exactly poiſed, that ſo he may ſwim about and entice the *Jack* to ſeize him; and you will ſoon perceive when he does it, by your *Floats* being drawn under Water; when you ſee this, ſtrike hard immediately (for you muſt not give him Time to *pouch*, as you do in *Trowling* (and then one or both of the *Large-Hooks* will be faſtened in his upper or lower Jaw. Hold him tite to it, for if you ſlacken your Line, he will break his Hold and get from you; and if you can keep his Head to the Surface of the Water, you will oblige him to keep his Mouth open, and then his Gills being cloſed, he will ſoon be ſuffocated for want of Air. If he be ſo large that you dare not venture to weigh him up, or if you have but a ſlender Hold of him, then make uſe of your *Landing-Hook*, as directed in *Trowling*. *N. B.* You ought to be provided with a *Tin-Veſſel* (which are ſold at the *Tin-Shops* on purpoſe for this uſe) in which you may preſerve your Live Baits.

N. B.

N. B. your Line muſt be made of ſtrong Silk or Hemp, I ſhould chuſe the latter, becauſe it is not ſo apt to *Kink* or twiſt as the former; and indeed you ought to be furniſhed with half a Dozen *Hooks*, at leaſt, *two Rings*, and as many *Reels* and *Lines*, that if an Accident ſhould break, or deſtroy one, you may not be debarr'd of your Sport for want of another.—— The Months of *March* and *September* are the beſt in the Year for *Trowling*, tho' any other will afford you Sport enough, but the Jacks are more in Seaſon then, and moſt Greedy: A cloudy and windy Day is to be preferr'd before any other, becauſe ſuch Weather encreaſe their Appetites, and makes them more eager to feed; and I have known many a large *Trout*, *Perch*, and *Chubb* (for they are Fiſh of Prey) taken by *Trowling*.

THERE is another Method of *Snapping*, which is called the *Dead-Snap*, and the ſame Rod and Line will ſerve for this, which you uſed in the *Live-Snap*; but the Manner is different as well as the Hook. You muſt put your Hook into the Mouth of your Dead-Bait *viz.* A *Gudgeon*, *Dace*, or *Roch*, and thruſting it out at the Gills, put it into the Vent of the Fiſh, and bury the Bend of it in the Body, ſo that the Point may reach to the Skin under the *Back-Fin*; and having done this, dip it into the Water, and keep it conſtantly in motion by lifting up and down. A Dead-Bait will this way diſplay itſelf more than a Living one, and ſooner entice the *Jack* to ſeize it; when you are ſenſible of it, ſtrike hard, and play and humour him as directed in *Live Snapping*: You may follow this Sport at any time of the Day, and

in

in any Seaſon, except the Weather be very boiſtrous.

THERE are ſeveral other Ways to take *Jacks* without a Rod, but I ſhall only mention Two. Take a large Piece of Cork, and a Line, which need not be above five or ſix Yards long; make a Hole in the middle, and faſten one End of the Line to it, then wind the reſt of the Line to it, till you leave about two Foot and half of it hanging down, and making a Slit in the End of the Cork, ſlip your Line into it, that it may not unwind without a little force. To the End of your Line faſten your Armed-Hook with a ſmall Piſtol-Ball on the Line, to keep the Fiſh from ſwimming near the Surface of the Water; then put your Bait on the Hook, as you were directed in the *Live-Snap*, and caſting both into the River, the Current will carry them along with it. You may put ſeveral of theſe into the Water at one Time, and all you have to do, is to watch them. You will ſoon perceive when a *Jack* has taken one of them, and is hung to the Hook, by the Corks being carryed with more force than ordinary down the Stream, or by the *Jacks* drawing it up the Stream. Now, if any of theſe *Men-of War* (for ſo they are termed) be out of your Reach, you muſt get a long Pole, or cut the Branch of ſome Tree, and ſcraping your *Landing-Hook* into it, put it forth, and draw the Line to Shore; manage the Fiſh as before directed.

THE ſecond Way is much the ſame with the former, however there is this difference, that you either faſten the Line to the Branch of a Tree, or to a little Peg on the Shore, and then wind-

winding the reſt upon the Cork, you caſt it into the River with the Bait on the Hook, and a large Piece of Lead to it under Water. Here you are confined to one Place only, but then you can with more eaſe come at your Line; in the other, you have the Advantage of the Baits ſwimming up and down, but can not ſo readily come at it; the one muſt have conſtant Attendance, the other may lie in the Water all Day or all Night.

I muſt confeſs that keen Sportſmen will not uſe either of theſe two laſt mentioned Methods, becauſe they are what we call *Poaching*, and particularly the latter: Nor would I here have ſhewn how to take *Jacks* by either of theſe ways, if I did not think it might be very Serviceable to many, who would uſe the former only for diverſion, and not make a conſtant practice of it; and by the latter a perſon may be ſoon furniſhed with a diſh of Fiſh to obliege a Friend, whoſe ſudden coming and ſpeedy departure would not give Time to the Fair-Angler, to make porviſion for him. Beſides there is an other Conſideration of more weight than this; *viz*: to oblige The *Fair-Sex*, when in a *Longing* Condition, and then I think *Poaching* may be allowed.

Of Angling for Roch, Dace, Perch, &c.

THE Beſt places for large *Roch* and *Dace*, are at *Crooked*-Deep, between *Wey bridge* and *Chertſey*, at *Shepherton* and Mortlack; but *Sheperton* Exceeds them all both in Quantity and ſize of the Fiſh.

AT this laſt mentioned place, I have ſeen a dozen Boats on the River at one Time, and three Anglers in each Boat; who have taken every day for a Week together each Man, never leſs than Ten dozen of *Roach* and *Dace*, from Ten to fourteen inches, and moſt of them have had the good fortune to catch fifteen dozen, ſome Twenty. At this ſeaſon their uſual Bait is *Sodden* Malt, baiting the place well with the Same, which is the Reaſon why ſuch plenty of Fiſh came thither: but as many other Rivers have alſo good Store of *Roach*, *Dace*, &c. and that every Lover of Angling can not conveniently come to theſe places above mentioned, I ſhall give them the beſt directions I am capable of doing.

AS for the *Rods* and *Lines* they need not be ſo Strong as thoſe, with which you *Angle* for *Carp* and here a *Hair-Line* is better than one made of Silk; your Float may be the ſame with *Carp-Fiſhing*, but your *Hooks* Smaller, and need not be ſo ſtrong, The Baits for *Roach* and *Dace* are the Same, *viz*: *Gentils*, artificial *Black Fly* on the Surface of the Water, and managed as in Angling for Trouts: but the beſt Bait for a *Perch* is a live *Minow* or ſmall *red-worm*, and the latter is good for a *Tench*, who delights in ſtill Water. You muſt *Sound* the depth of the Water, as you do in Angling for Carp; and the laſt Link of your Line ought be a fine *Indian Graſs*, a ſtrong Single Hair, or three fine Hairs well Twiſted together.

IF you uſe the *Indian-Graſs* you ought to ſoak it in Water ſome Hours before you go to Angle, to make it pliable; Otherwiſe it will be apt to break, and in chuſing this Graſs, Hold it up between you and the Light, and if you perceive any little Flaw in it, which will appear like a ſmall Knot, throw it from you, for it will deceive you if you uſe it.

IN Angling for *Roach* and *Dace* chuſe a Place where the Current of the Water is not too rapid, and as in Angling for *Carp* you lie on the Ground, and do not move with the Water, here you muſt trail on the Bottom, but go down with the Stream; and when you have found ſuch a Convenient hole or Current, then you will have what Anglers call a *Good ſwim*: But when you deſign to catch *Perch*, you muſt let your Bait near or under the Weeds; for being Fiſh of prey, they chuſe to lurk under Cover, like a *Jack*, that they may ſuddenly ſurpriſe their Food.

I remember a Wager to have been laid at *Windſor* between a *Young* and an *Old Angler*, who ſhould catch moſt Fiſh in three Hours The *Young One* followed ſuch Directions as I gave him, that is, he got a dead Dog full of Maggots, and finding a deep, clear Hole with a moderate Current of Water, tied the Dog to two Boughs, which hung over the River the Night before they were to Angle; ſo that by the ſwinging of the Dog *to* and *fro*, the Maggots fell into the Water, and brought a multitude of Dace to that place. Early in the Morning they went out together, and the *Young One* came to his Hole; kept at due diſtance

from the *Bank-Side*, and baited his Hook with a *Gentle*. He returned within the Time limited, being tired with ſo much Sport as he had, and brought near Ten Dozen of large *Dace* with him. The old Angler trudged up and down the River, and when he came Home, was ſure that he had won the Wager; but when he produced his Fiſh, they were not in Number, near half ſo many as his Antagoniſt had catched. From this Story we may conclude, that there is a Neceſſity of *Baiting* every Place very well in which you deſign to Angle.

How to catch Eels.

TO angle for *Eels* is a troubleſome and dirty work; and beſides, it is very unhealthful, becauſe they will Seldom feed but in the Night ſeaſon: They are certainly very pleaſant and wholeſome Fiſh, if I may ſo call them, for there are many who deny them to be Fiſh, properly Speaking, becauſe they are not produced from any *Spawn*. They will ſoon *ſheer* a *hair Line*, tho it has a dozen hairs (well twiſted together) in it. and if you uſe a *Silk-Line*, they will by their Working tye Several Knots upon it, which can not be eaſily undone. I ſhall here lay down a certain Method of taking them, which is little Known, and leſs practiced; but may be Effected with little Coſt and Trouble.

TAKE an Armfull of *Hay*, or Small *Bruſh-wood*, (the former is beſt) and in the middle of it put three or four Quarts of *Bullocks* or *Cows* blood; cover it over with the reſt of the *Hay*, and tye it faſt and firm with a Rope ſeveral times, making it like a round Ball, and pritty

pritty hard. When you have ſo done, tye another Rope or Cord to it, and making a Nooſe at the other End faſten it to a Peg Stuck into the Ground. Then caſt the Ball of Hay into the Water, and if it be in the Night come early in the Morning, and draw it out. You may make ſeveral of theſe. The *Eels* will ſoon Smell the Blood, and work themſelves into the *Hay-Ball* be it made never ſo hard; and being made drunk (as it were with the Gore.) will not be able to get out again, nor willing to depart from their Station; ſo that when you draw your Ball out of the River, or Pond, put it into a Pail, take off your Cords, and be carefull how you throw away the Hay; leſt ſome of the *Eels* be in it. They will ſwim in your Pail, and I have known many dozens taken this way in one *Hay Ball*, of different Sizes, and ſome of very large. But tho this be the Sureſt as well as the cleaneſt way to catch *Eels*, yet after if you have a mind to Angle for them, you muſt Bait your hook with a Small Fiſh, (Gudgeon or Minow) and lie upon the Ground, as in angling for *Barbel*. You may alſo have a long Line made of *Hemp*, to which you may tie Several *Ruſhia Hairs* or *Briſtles* with hooks faſtened to them each briſtle being five or Six inches long, and a yard diſtant from each other. At each end of the Line you muſt faſten a large peice of Lead or a Stone, not only to keep the Baits under water, but alſo to prevent the *Eels* from drawing the Line from the place, where you Expect to find it. If you have not a falſe Line tied to the other, and faſtened on the ſhore, then you muſt get a Drag, with a Cord made faſt to it, and caſting it into the Water, where your Line was placed, draw it very gently to you.

To

To Fiſh for Salmon.

THE firſt thing you muſt gain, muſt be a Rod of ſome ten Foot in the Stock, that will carry a top of ſix Foot; ſtiff and ſtrong; the Reaſon is, becauſe there muſt be a wyre Ring at the upper end of the top, for the Line to run through, that you may take up, and looſe the Line at your pleaſure, you muſt have the winder within two Foot of the bottom of your Rod, made in the manner expreſt with a ſpring, that you may put it on as low as you pleaſe.

THE Salmon ſwimmeth moſt commonly in the midſt of the River, in all his Travels he deſires to ſee the uppermoſt part of the River, Travelling on his Journey in the heat of the Day, he muſt take a Buſh, if the Fiſher-Man eſpy him, he goeth at him with his Spear, and ſo ſhortneth his Journey.

THE Angler that goeth to Fiſh for him with a Hook and Line, muſt Angle for him as nigh the middle of the Water as he can with one of theſe.

BAITS

TAKE two Lob-worms, and put the hook ſo near through the middle of them, that the four ends may hang of an equal length, and ſo Angle as near the bottom as you can, feeling your Plummet run on the ground, ſome twelve Inches from the hook.

IF you Angle for him with a Flye (which he

he will riſe at like a Trout) the Fly muſt be made of a large Hook, which Hook muſt carry ſix Wings, or four at the leaſt; there is Judgment in making of theſe Flies.

THE Salmon will come at a Gudgeon in the manner of a Trowling-Line, and cometh at it bravely, with his fine Angling for him; you muſt be ſure your Line be of twenty-ſix, or thirty Yards long, that you may have your convenient time to turn him in, or elſe you are in danger to loſe him, but if you turn him, you are likely to have him; all the Danger is in the running out both of Salmon and Trout.

YOU muſt forecaſt to turn the Fiſh as you do an unruly Horſe, either upon the Right or Left Hand, and wind up your Line as you find occaſion in the guiding of the Fiſh to the Shoar, having a large Landing-Hook to take him up.

Note, There are ſome Fiſh, as Shad, Thwait, Plaice, Peel, Mullet, Flounders, &c. covet for the moſt part to be in or near the Salt or Brackiſh Waters, which ebb and flows naturally: The laſt, however, that is the Flounder, are often taken in freſh Rivers, as coveting the Sand and Gravel, deep gentle Streams, near Banks, and by Miller's Dams, Sluices, &c.

AND there is a Fiſh called the *Umber*, which affects marly clay Ground, clear and ſwift Streams far from the Sea, the greateſt quantity of theſe Fiſh are found in *Darbyſhire* and *Staffordſhire*.

How to Observe when to Angle.

I. TO understand the best time when to Angle in, We must first consider Affirmatively, when most Seasonable: Or, 2. Negatively, when Unseasonable.

1. SEASONABLE Angling is, when the Weather is calm, serene, and clear; tho' the Cool cloudy Weather in Summer is to be preferred, provided the Wind blow not too boistrously, to hinder your easie Guiding your Tools; in the hottest Months the cooler the better.

2. WHEN a violent Shower hath disturbed the Water and mudded it, then with a red Worm, Angle in the Stream at the Ground.

3. A little before Fish spawn, when they repair to gravelly Fords, to rub and loosen their full Bellies; they bite freely.

4. FROM Sun-Rising, till Eight of the Clock in the Morning, and from Four in the Afternoon 'till Night, for *Carp* and *Tench*. In *June* and *July*. *Carps* shew themselves on the very rim of the Water, then fish with a Lob-worm, as you would with a natural Fly. But be sure to keep out of Sight.

5. IN *March*, *April*, and *September*, and all Winter, when the Air is clear, serene, and warm. And after a Shower of Rain, which hath only beaten the Gnats and Flies into the River, without muddying. The two first mention'd Months with *May* and part of *June*, are most proper for the Fly; Nine in the Morning, and three o'Clock

o'Clock in the Afternoon, is the beſt Time; as likewiſe, when the Gnats play much in a warm Evening.

6. IN a *Cloudy* and *Windy* Day, after a Moonſhine clear Night, for the Brightneſs of the Night (thro' fear) making them abſtain from Feeding, and the Gloominess of the Day, emboldening and rendering them (through Hunger) ſharp, and eager upon Food, they bite then freely.

7. LASTLY, at the opening of *Milldams* or *Sluces*, you will find *Trouts*, &c. come forth ſeeking Food, brought down by the Water. We come next to demonſtrate the Time proper, *i. e.*

8. UNSEASONABLE Angling, in ſhort, is when the Earth is parched and ſcorched with vehement Heat and Drought; benummed and frozen with Cold, Froſt and Snow, or refrigerated with Spring Hoar-froſts; or blaſted with the ſharp, bitter, nipping, North or Eaſt Winds: Or, when bluſtring *Boreas* diſorders your well guiding your Tackling, or the *Sheep ſhearers Waſhings* glutted the Fiſh, and anticipated your Bait; when the withdrawing of your Sport foreruns a Storm, and adviſes you to ſome ſhelter; or lately, when the Night proves Dark and Cloudy, you need not trouble your ſelf the next Day, 'tis to no Purpoſe, *&c.*

III. FOR providing *Stocks*, the beſt Time is the Winter *Solſtice*, when the Sap is in the Roots of Trees, and their Leaves gone. It is improper after *January*, the Sap then aſcending into the Trunk, and expanding it ſelf over all the Branches; See that your Stocks be *Taper-grown*.

Of Flies.

OF Natural Flies, there are innumerable, and therefore it cannot be expected I can particularize all; but some of their Names I shall nominate, *viz.* The *Dun-fly*, *Red fly*, *May fly*, *Tawny-fly*, *Moor fly*, *Shell-fly*, *Flay-fly*, *Vine fly*, *Cloudy* or *Blackish fly*, *Canker-flies*, *Bear-flies*, *Caterpillers*, and thousands more, differing according to the Soils, River or Plants.

ARTIFICIAL Flies, are made by the ingenious Angler, according to Art, in Shape, Colour, and Proportion, like the natural Fly, of *Furr*, *Wool*, *Silk*, *Feathers*, &c. To delineate which, I must confess my self not so accurate and skillful a Painter, nor can any Pen drawing illustrate their various Colours so, as to direct their Artificial Counterfeit: Nature will help him in this by Observation, curiously flourishing their several orient and bright Colours, after which they take their Names, as beforesaid: And therefore to furnish your self with both Natural and Artificial Flies, repair in the Morning to the River, and with a Rod beat the Bushes that hang over the Water, and take your Choice.

1. OBSERVE to Angle with the Artificial Fly in Rivers disturbed somewhat by Rain, or in a Cloudy Day, the Wind blowing gently: If the Wind be not so high, but you may well guide your Tackle, in plain Deeps is to be found the best Fish, and best Sport: If small Wind breeze, in swift Streams is best Angling: Be sure to keep your Fly in perpetual slow Motion; and observe that the Weather suit the Colour of your Fly,

as

as the light Colour'd in a clear Day, the Darkiſh in a dark, &c. As likewiſe according to the Waters Complexions, have your Fly ſuitable.

2. LET your Line be twice as long as your Rod: Keep as far as you can from the Water-ſide, the Sun on your Back: In caſting your Fly let that fall firſt; your Line not touching the Water.

3. HAVE a nimble Eye, and active quick Hand to ſtrike preſently upon the Riſing of the Fiſh, leſt, finding his Miſtake, he ſpew out the Hook.

4. IN ſlow Rivers caſt your Fly croſs them, let it ſink a little, draw it back gently, without breaking or circling the Water; let the Fly float with the Current, and you will not fail of excellent Sport.

5. OBSERVE to let the Wings of your *Salmon Flies* to be one behind another, whether two or four, and they and the Tail long, and of the fineſt, gaudieſt Colours you can chooſe.

LASTLY, In clear Rivers, a ſmall Fly with ſlender Wings is beſt, and in muddieſt Rivers a Fly of a more than ordinary large Body.

Fiſhes Eyes.

TAKE out the Eyes of ſuch Fiſh as you catch, and put three or four of them on a Hook, and they will prove an excellent Bait for moſt ſorts of Fiſh.

THUS much for Flies, I come next to that I called *Dead-Baits*, and ſhall begin with the ſeveral ways of making them.

NOW

NOW take your Tops of beſt *Ground-Hazle* that can be had, ſmooth, ſlender, and ſtrait, of an Ell long, pliant and bending; and yet of a ſtrength, that a reaſonable Jerk cannot breakit, but it will return to its firſt Straitneſs, leſt otherwiſe you endanger your Line. Keep them two full Years before you uſe them; having preſerved them from Worm eating or Rotten, by thrice a Year rubbing, and chafing them well with Butter (if ſweet) or Linſeed or Sallet Oil; and if bored, Oil poured into the Holes, and bathed four and twenty Hours in it, and then thrown out again, will exceedingly preſerve them.

THE Line, to make it neat, handſome, and ſtrong, twiſt the Hair you make it of even, having ſeen if the Hair be of an equal bigneſs; then ſteep your Line in Water, to ſee if the Hairs ſhrink, if ſo, you muſt twiſt them over again. The Colour of the Hair is beſt of *Sorrel*, *White*, and *Gray*; *Sorrel* for muddy boggy Rivers, and the two laſt for clear Waters. Nor is the *Pale watry Green* contemptible, died thus; Take a Pint of ſtrong *Ale*, half a Pound of *Soot*, a little of the Juice of *Wallnut* Leaves, and *Allum*; boil theſe together in a Pipkin half an hour, take it off, and when 'tis cold, put in your Hair. In making your Line of Hair, mix not Silk; as likewiſe diſtinguiſh the Line for the Ground Angle, and that for the Fly Rod, the laſt muſt be ſtronger than the firſt; in that for the Artificial Fly, making the uppermoſt Link twenty Hairs long, leſs in the next, and ſo leſs 'till you come to the Fly. Laſtly, at each End of your Line make a Loop, (called a *Bout*) the one larger, to faſten to, and take it from the Top of your Rod; and the other leſſer, to hang your Hook-line on.

YOUR

YOUR Hook muſt be long in the Shank, ſomething round in Compaſs; the Point ſtrait and even, and bending in the Shank. Set on your Hook with ſtrong ſmall Silk, laying your Hair on the Inſide of the Hook.

YOUR *Float* challenges divers Ways of making, ſome uſing *Muſcovy* Duck-Quill for ſtill Waters. Others the beſt ſound Cork, without Flaws or Holes bored through with a hot Iron, and a Quill of a fit Proportion put into it; then pared into a pyramidal Form, or in the Faſhion of a ſmall Pear, to what bigneſs you pleaſe, and ground ſmooth with a Grind-Stone or Pumice; this is beſt for ſtrong Streams.

IN fine, *To plumb the Ground*, get a *Carbine* Bullet bored through, and in a ſtrong Twiſt hanged on your *Hook* or Rod. To ſharpen your *Hook*, carry a little *Whetſtone*. To carry your ſeveral Utenſils without incommoding your Tackle, have ſeveral *Partitions* of Parchment. And in ſhort the Ingenious Angler will not be unprovided of his *Bob* and *Palmer*; his Boxes of all Sizes for his *Hooks*, *Corks*, *Silk*, *Thread*, *Flies*, *Lead*, &c. his *Linning* and *Woollen Bait-bags*; His ſplinter *Oſier light Pannier*; and laſtly, his *Landing-Hook*, with a Screw at the End, to ſcrew it into the Socket of a Pole, and ſtick'd into the Fiſh, to draw it to Land: To which Socket, a Hook to cut up the Weeds, and another to pull out Wood may be faſten'd.

FOR the *Breame*. The moſt ſeaſonable Time to Angle is, from St. *James-Tide* 'till *Bartholomew-Tide*. He ſpawneth in *June* or beginning of *July*; is eaſily taken, as falling on his ſide after one or two gentle Turns, and ſo drawn eaſily to Land. The beſt Bait for him (moſt delightful to him) is the *Red-worm* (found in Commons and Chalky Grounds after Rain) at the Root of a great Dock, wrapt up in a round Clue. He loves alſo Paſte, Flag-worms, Waſps, Green-flies, Butter-flies, and a Graſs-hopper without Legs.

BAIT your Ground the Night before with Groſs-ground Malt, boiled and ſtrained, and then in the Morning with the Red-worm bait your Hook, and plumbing your Ground within half an Inch, Fiſh.

THE *Bleak*, an eager Fiſh, is caught with all ſorts of Worms bred on Trees or Herbs, alſo with Flies, Cad-baits, Bobs, Paſte, Sheeps-blood, white Snails, Waſps, Gnats, *&c.* In a warm clear Day the ſmall Fly at the rim of the Water is beſt; in a Cloudy Day, *Gentles* or *Cad-Baits*, two Foot under the Water.

THE *Bull-head* or *Miller's-Thumb* being Childrens Recreation, I ſhall ſpeak little of them, only being ſerviceable for Baits, I ſhall only ſay he is eaſily taken with a ſmall Worm, being lazy and ſimple, and will ſwallow any thing; and the *Minnow*, *Loach* and *Barnicle* being of the ſame Diet, I place here too.

THE *Chevin* loveth all ſorts of Worms, *Flies*, *Cheeſe*, *Grain* and *Blackworms*, their Bellies being ſlit, that the white may be ſeen; and very much delighteth in the Pith of an Oxes back,

the

the tough outward Skin being carefully taken off, without breaking the inward tender Skin. In the Morning early, angle for *Chevins* with a *Snail*; in the Heat of the Day with ſome other Bait; in the Afternoon with the Fly; the great Moth with a great Head, yellow Body, and whitiſh Wings uſually found in Gardens about the Evening: The larger the *Chevin*, the ſooner taken; loving his Bait larger, and variety on a Hook.

THE *Char* is a *Lancaſhire* Fiſh, found in a *Mere*, call'd *Winander-Mere* in that County, the largeſt in *England*.

FOR the *Chub*, called by ſome a *Chevin*, by others a *Villain*. Bait your Hook with a Graſs-hopper, find the Hole where he lies, accompanied in a hot Day, with twenty or more, floating almoſt on the very Superficies of the Water; chooſe which you think beſt, and faireſt, and drop your Hook ſome two Foot before him, and he will bite at it greedily, and cannot break hold with his *Leather Mouth*; let him play and tire, leſt you break your Line. If you cannot get a *Graſs-hopper*, then any Worm or Fly you will. In cold Weather, fiſh for him near the bottom, and the *Humble Bee* is the beſt Bait. Some appropriate Baits according to the Month, but I ſhall omit that; the *Chub* (being beſt and in his Prime in the Winter) a Paſte made of Cheeſe and Turpentine is the only Bait to take him.

THE *Carp* is ſubtle and full of Policy, will never bite in Cold Weather, but in Hot you cannot be too early or too late. In *March* he ſeldom refuſeth the *Red worm*, in *June* the *Cad-baits*, and the three next Months the *Graſs-hopper*.

TO

To bring Fiſh, if any in the Pond or River, to the Place you deſire.

BOIL clean Barly in Water 'till it burſts, with Licorice, add a little Mummy; and ſome Honey, and beat them together in a Mortar into a ſtiff Paſte, and boil about the Quantity of a Wall-nut of this Paſte with a Quart of Barley, 'till it grows glutenous, and then lay it for a Ground Bait, and the Fiſh will flock about it from all Parts.

To take Fiſh in the Night with a Light.

THIS is an admirable way to ſupply you with a ſuddain Diſh, *viz.* Take a Glaſs in the form of an Urinal very deep, put as much Clay in the bottom of it as will ſink the Mouth of it within an Inch of the Water, floating on pieces of Cork, tied about the Neck to keep it ſteadily upright; then place a Candle in it, by ſticking it in the Clay-ſocket, anointing the out-ſide of the Glaſs with Oil of Aſper. This Light will ſhine a great way in a ſtill Water, ſo that the Fiſh being amazed at ſo unuſual a Sight, will come out of their Holes about it, and be detained with the Scent of the Oil ſo long that with a Hoop-Net you may take great Store of them.

An Universal bait to take all manner of Fish, but especially TROUTS

TAKE of the Juice of Camomile two spoonfulls, Oyl of Spike four drams, Spirit of Vitriol one Ounce, Oyl of Comfrey by Infusion, six drams, Goose-grease one Ounce; Dissolve these over the Fire, being well melted, let it stand 3 or 4 days before you stop it up, with a good Cover made of Parchment and Leather, and it will keep good for seven Years.

When to drag upon the Ground, and when not.

WHEN you Fish in a quick Stream drag a Quills length or more.

ALSO when the Water is not clear, but of a White or Clay Colour, and if you put a little piece of Scarlet a little above the Hook, the Fish will see the Bait the better.

SOMETIMES when you are at the Sport the Wind ariseth, and makes your Float dance upon the Waves, then always observe, and watch well the motion of your Float under Water, and not the Top of your Float.

I saw an Angler whipping for *Bleaks* and *Dace* with a May-flye, but he put on a Gentle upon the Hook besides, and he had excellent Sport.

Of

Of keeping Baits.

THE *Red-Worm* muſt be kept in a Bag of Red Cloath, with a Handful of chopt *Fennel* mixt with half ſo much freſh, black, and fertile Mould, as will ſcower and preſerve them: All other Worms, with the Leaves of Trees they are bred on, renewing them often in a Day. Only the *Cad bait*, *Bob*, and *Canker*, &c. muſt be kept in the ſame Things you find them.

THE great *White Maggots*, keep them in Sheep's Tallow, or little bits of a Beaſts Liver; and to ſcower them, hang them warm in a Bag of Blanketing, with Sand.

THE *Frogs* and *Graſhoppers*, in wet Moſs and long Graſs, frequently moiſtened; and when uſed the Legs of the firſt, and the Wing of the other muſt be cut cloſe off.

THE *Flies*, uſe them as you take them. Only, the *Waſps*, *Hornets*, and *Humble-Bee*, muſt be dry'd in an Oven, their Heads dipp'd in Sheeps Blood, and dry'd again, may be kept in a Box for uſe.

TO begin then with the Barbel. The beſt Time for Angling for this Fiſh is at the latter end of *May*, *June*, *July*, and beginning of *Auguſt*, in his Haunts aforemention'd; and the beſt Bait (omitting others) is the well ſcoured Lob-Worm (being of a curious cleanly Palate as well as Shape) or Cheeſe ſteep'd an Hour or two in clarified Honey: He is a ſubtle Fiſh, extraordinary ſtrong, and dogged to be dealt with, and therefore be ſure to have your Rod and Line ſtrong and long, or you may endanger to break it.

OF

Of Pastes.

1. BEAT in a Mortar the Leg of a young *Coney* (vulgarly called the *Almond*) or of a Whelp or Catling, and a Quantity of Virgins Wax and Sheeps Suet, till they are incorporated, and temper them with clarified *Honey* into Paste.

2. *SHEEPS blood, Cheese*, fine *Manchet* and clarified *Honey* tempered.

3. *SHEEP's Kidney suet, Cheese, fine Flower*, with clarified *Honey* tempered.

4. *CHERRIES, Sheep's-blood, Saffron*, and fine *Manchet* made into a Paste.

5. BEAT into a Paste the fatteſt old *Cheese*, the ſtrongeſt *Runnet* can be got, fine *Wheat-flower* and *Aunts-seed* Water: If for a *Chub* you make the Paste, put a little rusty *Bacon*.

LASTLY, *Mutton-Kidney-suet*, and *Turmerick* reduced to a fine Powder, the fatteſt old *Cheese*, and ſtrongeſt *Rennet*, wrought to a Paste, adding *Turmerick*, till the Paste be of a curious Yellow; and is excellent for *Chevin*.

ANOINT your Bait with this Confection: Take the Oil of *Asſray*, *Cocculus Indiæ*, and *Assafœtida* beaten, and mix with it as much Life-Honey; then diſſolve them in the Oil of *Polypody*, and keep it in a cloſe Glaſs for your uſe. And that your Paste may not waſh off your Hook, beat Cotton-Wool or Flax into it.

TO

To take Herns.

AND becauſe Gentlemen who have Fiſh-Ponds, wonder they loſe ſo many Fiſh, and are apt to cenſure ſometimes undeſervedly their Neighbours, when it is the inſatiable Hern that is the true Cauſe, I ſhall next lay down the beſt and moſt approved Way of taking the great Fiſh-devouring Hern, whoſe Haunt having found, obſerve this Method to take him. Get three or four ſmall Roaches, or Dace, take a ſtrong Hook, (not too rank) with Wyre to it, and draw the Wyre juſt within the Skin, from the ſide of the Gills to the Tail of the ſaid Fiſh, and he will live four or five Days, (if dead, the Hern will not touch it.) Then have a ſtrong Line, of a dark green Silk, twiſted with Wyre, about three Yards long, tie a round Sone of a Pound to it, and lay three or four ſuch Hooks, but not too deep in the Water, out of the Herns wading; and two or three Nights will anſwer your Expectation.

Some Obſervations of an Old Experience'd Angler.

1 IF in the hot Months, cloudy Weather is beſt, when a ſmall Gale ſtirs the Water.

2. When the Floods have carried away the Filth that ſudden Showers incumbred the Water withal, and the River and Pond retains its uſual Bounds, looking of a whitiſh Colour.

3. WHEN a violent Shower has troubled or muddied the River, or a little before the Fiſh ſpawn, at what Time they come into the ſandy Ground to looſen their Bellies.

4. AFTER

4. AFTER Rains, when the Rivers keep their Bounds, yet riſe and run ſwiftly, for then they ſeek Shelter in Creeks and little Rivulets running into the River.

5. FISH for Carp and Tench early, that is before Sun riſe, till Eight in the Mornig; and from Four in the Afternoon till after Sun-ſet. In *March*, the beginning of *April*, and the latter End of *September* and all Winter, when there are no great Froſts, the Fiſh bite in the warm of the Day, the Wind being ſtill; but in Summer Months Morning and Evening beſt.

6. FISH riſe beſt at the Fly after the Shower has muddied or clouded the Waters, and Fiſh with Flies in generally, *March*, *April*, *May*, and the begimming of *June*, is the beſt for Trout, you may Angle in a clear Star-light Night, for they are then roaving about for Prey; he bites beſt in muddy Water, and the beſt Time of Fiſhing for him is from 8 to 10 in the Morning, and from 3 till 5 in the Afternoon.

7. THE Salmon Fiſhery is beſt in *May*, *June*, *July*, and *Auguſt*, from three in the Afternoon till Sun-ſet, and in the Morning as before.

8. THE Barble bites beſt early in the Morning, till Ten or Eleven in *May*, *June*, *July*, and the beginning of *Auguſt*.

9. THE Perch and Ruff bites beſt all Day in cool cloudy Weather.

10 THE

The Names of the Flies that are uſed in Angling, with the Times when they are in Seaſon, and what the Bodies, and Wings are made of.

1. A Stone Fly, which is in ſeaſon in *April*, the Body of it is made with black wool, made yellow under the Wings, and under the Tayl; the Wings are made of a Mallards, Feather.

2. A Ruddy Fly, is in ſeaſon in the beginning of *May*; the Body is made of red Wool wrapt about with blue Silk, the Wings are made of the Wings of a Drake, and a red Hackle.

3. The yellow, or greeniſh Fly, is in ſeaſon in *May*, with made yellow Wool, his Wings made of red Hacles and the Wings of a Drake.

4. The Dun Fly is ſometimes of Dun-Wool and ſometimes black, it is in Seaſon in *March*, his Wings made of Partridge-Feathers, black Drakes Feathers and the Feathers under his Tayl.

5. The Black Fly, in ſeaſon in *May*, made of black-Wool, and wrapt about with Peacocks Tayl, the Feathers of the Wings of a brown Capon, with the blue Feathers in his head.

6. The ſad yellow Fly, in ſeaſon in *June*, made of black Wool, with a yellow Liſt on either ſide, the Wings of a Buzzard, bound with black braked hemp.

7. The Mooriſh Fly, in ſeaſon in *June*, made of

of duskiſh Wool, the Wings the black of a Drake.

8. The tawny Flye, good till the middle of *June* made of *Bears-Wool*, the Wings made contrary one againſt the other, of the whitiſh Male of a wild Drake.

9. The Waſp-Fly, in ſeaſon in *July*, made of *Black-Wool*, wrapt about with *Yellow Silk*; the Wings of a Drakes Feathers, or Buzzards.

10. The *Shell-fly* good in the middle of *June*, made of *Greeniſh Wool*, lapt about with Pearl of a Peacocks Tayl; the Wings of a Buzzards Feathers.

11. The Dark Drake Fly, made with *black-Wool*, wrapt about with *black Silk*, are in ſeaſon in *Auguſt*; the Wings the Male of the black Drake with a Head.

12. The *May Fly*, made of greeniſh colour'd Cruel, or Willow-Colour, and darken it chiefly with Waxzed ſilk, or Ribb'd with a black Hair, or ſome of them Ribb'd with ſilver Thread, and ſuch Wings for the Colour, as you ſee the Fly to have at that ſeaſon.

Laſtly, The Oak-Fly, the Body made of Orange Tawney, and black Cruel, the Wings of Iſinglas and the Feather of Moſſes, ſtuck on with Yellow-Wax.

To

HAVING thus briefly laid down such *Rules* and *Directions*, as may enable a *Young Angler* not to think his Time altogether Thrown away, which he ſpends at the Water-ſide, and which will be ſatisfactory to him if he purſues them; I have nothing to ſay, but that Experience and Obſervation muſt render him Compleat. But, as there are many Anglers, who are not willing, and ſome whoſe pockets will not allow them to have their Fiſh dreſſ'd at a Tavern, which is very Expenſive; and again, as few publick-houſes do underſtand to dreſs a Diſh of Fiſh, as it deſerves, eſpecially in the Country, or even within a few Miles of *London*; I ſhall here inſert ſuch Receipts, as will be very acceptable, the niceſt Pallats not excepted.

How to dreſs TROUT.

SOME chuſe to have their *Trouts* Boiled, others Fry'd, but the latter is certainly the beſt and ſweeteſt way of dreſſing them; and then if you would have them ſerved up to the Table *Secundum Artem*, you muſt get ſome Beef, and make rich Greavy, to which add *Oiſters*, *Shrimps*, *Pickled Muſhrooms*, and ſpawn of Lobſter bruiſed and ſome Nutmeg, then pour in your melted Butter, warm them all together over the Fire and put your Same into the Diſh with your Trouts. But for thoſe who are not ſo very curious and dainty, the Greavy and Butter mixed together, or plain melted Butter will be ſufficient, and I am ſure much wholeſomer than the former.

How to dreſs CARP.

Save the Blood of your Carp, and if it be a large Fiſh mix with it a Quart of *Claret*; if a Middling One, a Pint; with a ſmall Quantity of *Nutmeg*, Cloves, and *Mace* and *Salt* with a Bunch of *Thyme*. Let your Carp ſtew in this Liquor over a gentle Fire (cloſe covered) till the Skin begins to Crack, then take off your Stew-Pan, and having a warm Diſh, place your *Carp* therein, pour the Liquor over it, firſt taking out the Bunch of Thyme, and ſend it to Table.

How to Dreſs BARBEL

BARBEL, if dreſſed *Carp*-Faſhion, will rather Exceed, than fall ſhort of *Carp*; but if you do not think fit to dreſs them after that manner, then put an handfull of Salt into your Water, One Large Onyon cut into ſmall peices, ſome *Lemmon-Peel* either dried or Green, a Bunch of Thyme, ſome whole *Pepper* and *Horſe*-Radiſh-Root. If your *Barbel* be large, put in a Pint of Vinegar, if middling, half a Pint; and Boil your Fiſh in the Liquor. As to your ſauce, Take a pound of freſh Butter and melt it, put in a quarter of a pint of *Claret*, ſome Nutmeg and three *Anchoviſe*; ſqueeſe half a *Lemon* into it, and add ſome Oiſters or Shrimps. Then ſerve it up to Table. *N. B.* a little Bunch of *Thyme* ought to be boiled in the ſauce, which will give it a pleaſant Flavicur.

How to Dreſs JACKS and PIKES

IF you have a mind to *Roaſt* your *Jack* or *Pike*, you muſt put a Pudding in his Belly made thus. Take a Pound of Beef *Suet*, ſhred very ſmall; an handfull of *Thyme*, and a little *Winter-ſavory*, ſhred fine and pickt from their Stalks; ſome *Lemon-peel* cut ſmall, three *Anchoviſe* cut in pieces, a whole Nutmeg Grated, and the *Crum* of two Rouls grated very fine; and the Yelks of five *Eggs*. Mix theſe well together with ſome *Pepper* and *Salt*, and make a Pudding. The ſauce muſt be thus. A Quart of rich Gravy, or a Pint, in proportion to the ſize of the Fiſh, a Pound of Freſh Butter, half a *Nutmeg* grated, a pint of *Shrimps*, with *Muſhrooms* and *Oiſters*. A whole *Lemon* ſqueeſed, if you uſe a Quart of Gravy.

For Roach, Dace and *Perch. &c.*

PLAIN ſauce is here uſed, with a little Vinegar or Lemon-Juice in it; if you are more curious you may add Gravy, and an *Anchoviſe*. But the beſt way to dreſs a *Dace*, is in the manner of a *Freſh-Herring*, by Scoring it on the ſides, and broiling it; the ſauce as before.

IF

IF you have more *Trout*, *Barbel*, or *Jacks*, than you can well diſpence with for the preſent, and you are Apprehenſive that they will not keep ſweet by reaſon of the Heat of the Weather, then you muſt Pickle them. Now this Pickle is no other than ſuch Liquor as you were directed to boil *Barbel* in, only that you muſt add a Quart or three Pints of Vinegar more to the former, and leave out the *Onyon*, *Thyme*, *Horſe-Radiſh* and *Lemmon-Peel*.

To ſtew a CARP.

TAKE a living *Carp*, and knock him on the Head and open him in the Belly, take heed you break not the Gill, pour in a little Vinegar, and waſh out all the Blood, ſtir it about with your Hand, and keep the Blood ſafe; then put as much White-Wine in a pan or skillet as will almoſt cover, and ſet it on the fire; put to it an Onion cut in the middle, a Clove, or leſs of Garlick, a Race of Ginger ſhred, a Nutmeg quartered, a Faggot or bundle of ſweet Herbs, and 3 or 4 Anchovies; your *Carp* being cut out and rubbed all over with Salt, when the Wine, (into which you may put a little Water) doth boil, put the Carp in, and cover him cloſe, and let him ſtew up about a quarter of an hour, then put in the Blood and Vinegar, with a little Butter, ſo diſh up the Carp, and let the Spawn, Milt, and Revet be laid upon it, the Liquor that boiled him with the Butter, is the beſt Sauce, that is to be eaten as broth: Garniſh the diſh with Limons and grated Bread.

To Boyl Roach, or Dace, with all manner of Sauce.

TAKE your Roach or Dace, and having ſcrap'd off their Scales very clean, throw them into ſome White-Wine Vinegar, and let them lye an Hour or two, then take 'em and dry 'em well with a Cloth, and flower 'em, lay them over a clear Fire, and turn them often, ſo broil'd, you may ſerve them up with Oyſters, or Muſhroons, garniſh with Barberries, and Limons.

To boyl Perches.

LET your Liquor boyl, and your Pan be ſeaſoned with a little White-wine, Gravy, and Vinegar, with a grated Nutmeg, and almoſt boyl it over a chafing-diſh, then pour ſweet Butter over it: Garniſh it with Barberries and ſliced Limons.

To boyl Eels.

CUT the Eels and ſtew them; when they are laſt done, beat a little Ale with Vinegar and put to the Liquor with ſome Parſley and ſweet Herbs; diſh them and ſerve them up in their broth, with a little ſalt.

To dreſs a Cods Head.

CUT off the Cods-head beyond the Gills, that you may have part of the body with it, boyl it in Water and ſalt, to which you may add half a pint of the beſt White-Wine Vinegar, the Head muſt be little more than Covered; before you put it into the Fiſh-Kettle, take a quart

quart of the biggeſt and cleaneſt Oyſters, and a bunch of ſweet Herbs and Onions, and put them into the Mouth of the Head, with a Pack-thread bind the Jaws faſt and put it into a Net, or Napkin, after you have pickt and waſht it very clean: When it is boyled enough, take it up and ſet it a drying over a Chafing-diſh of Coals, then take the Oyſters Liquor, 4 Anchovies, and a ſliced Onion, put to them a quarter of a pint of White-wine, a ſufficient of ſweet Butter, and melt them together, and pour it on the Cods-head; ſtick all, or moſt of the Oyſters upon the Head, or where they will enter, and Garniſh it over with them; and ſet it ſmoaking upon the Table, ſome grate Nutmeg on it firſt, which indeed has a pleaſant Flavour, Oyl is offenſive to the Stomach and Head, Garniſh the brim of the diſh, with Limon, interſpers'd with Barberries, and ſliced bay-leaves.

To keep Salmon freſh a whole Month.

FIRST boyl your ralmon as uſually then put it into an Earthen pot, and cover it in good White Wine Vinegar, putting thereto a branch of Roſemary, and keep it very cloſe covered, and ſo you may keep it, that it will retain its perfect taſte and delicacy for one Month or more.

To boyl Flounders or Jacks the beſt way.

TAKE a Pint of White-wine, the tops of young Thyme and Roſemary, a little whole Mace, a little whole Pepper, ſeaſoned with Verjuice, Salt, and a little ſweet Butter, and ſo ſerve it; you may do fiſh in the ſame Liquor three or four times.

To

To make an Eel Pye.

WASH, flea and cut your Eel in pieces, putto them a handful of Sweet Herbs, Parſley minc'd with an Onion, ſeaſon them with Pepper, Salt, Cloves, Mace and Nutmeg, and having your Coffin made of good Paſte, put them in, and ſtrew over them a handful of Currans, and a Limon cut in ſlices, then put on Butter and cloſe the Pye, when it is baked, put in at the Funnel a little ſweet Butter, White-Wine and Vinegar, beaten up with a couple of Yolks of Eggs.

To ſtew a TROUT.

TAKE a large *Trout*, fair Trim'd and waſh it, put it into a large Pewter-diſh; then take half a Pint of ſweet Wine, with a lump of Butter, and a little whole Mace, Parſley, Savoury, and Thyme; mince them all ſmall, and put them into the Belly of the Trout, and ſo let it ſtew a quarter of an Hour, then mince the Yolk of an hard Egg, and ſtrew it on the Trout, lay the Herbs about it, ſcrape on Sugar and ſerve it up.

To ſtew a PIKE.

AFTER your *Pike* is dreſt and opened in the back and laid flat, as if it were to fry, then lay it in a large Diſh, put to it White-Wine to cover it, ſet it on the Coals, and let it boil gently, if the Scum ariſe take it off, then put to it Currans, Sugar, Cinamon, Barberries, as many Pruans as will garniſh the Diſh, then cover it cloſe with another diſh, and let it ſtew till the fruit be ſoft, and the *Pike* enough, then put to it a good piece of

of ſweet Butter; with your ſcummer take up the Fiſh, and lay it in a Diſh with ſippets, then take a couple of Yolks of Eggs only, and beat them together well, with a ſpoonful of Cream, and as ſoon as the Pickle is taken out, put it into the Broth, and ſtir it exceedingly, to keep it from Curdling, then pour the Broth upon the *Pike*, and Trim the ſides of the diſh with Sugar, Pruans, and Barberries, with ſlices of Oranges and Limons, and ſo ſerve it up.

To Roaſt a piece of Sturgeon.

STOP your *Sturgeon* with Cloves, then ſpit it, and let it roaſt very leaſurely, baſting it continually, which will take away the hardneſs; when it is enough, ſerve it upon the Veniſon ſauce; with ſalt only thrown upon it.

To boil a Gurnet or Roach.

FIRST draw your Fiſh, and then either ſplit it, or Joynt it open in the Back, and Truſs it round; then waſh it clean, and boil it in Water and Salt, with a Bunch of ſweet Herbs, then take it up in a large diſh, and pour into it Verjuice, Nutmeg, Butter and Pepper, after it hath ſtewed a little, thicken it with the Yolks of Eggs, then remove it hot into another Diſh, & garniſh it with ſlices of Oranges, and Limons, Barberries, Pruans and Sugar, and ſo ſerve it up.

To make a Carp Pye.

AFTER you have drawn and waſh'd and ſcalded a fair large Carp, ſeaſon it with Pepper, Salt, and Nutmeg, and then put it into a Coffin, with good ſtore of ſweet Butter, and then caſt on

Raiſins of the Sun, the juice of Limons, and ſome ſlices of Orange peels, and then ſprinkle on a little Vinegar, cloſe it up and bake it.

To Barrel up Oyſters.

OPEN your Oyſters, take the Liquor from them and mix it with a reaſonable quantity of the beſt White-wine-vinegar, with a little ſalt and Pepper; then put the Oyſters into a ſmall Barrel and fill them up with Pickle, and this will keep them 6 Months, ſweet and good, and with their Natural Taſte.

To Roaſt Eels.

WHEN they are flead cut them to pieces, about 3 or 4 Inches long, dry them, and put them into a diſh, mince a little Thyme, 2 Onions, a peice of Limon-peel, a little Pepper beaten ſmall, ſtrew it on the Eels, with the Yolks of 2 or 3 Eggs, then having a ſmall Spit, or elſe two ſquare ſticks made for that purpoſe, ſpit through the Eels croſs ways, and put a bay-leaf between every piece of Eel, and tying the ſticks on a ſpit let 'em roaſt; you need not turn 'em conſtantly, but let 'em ſtand till they hiſs or are brown, ſo do them on the other ſide, and put the diſh (in which the Eel was with the ſeaſoning) underneath to ſave the Gravy, baſte it over with ſweet Butter. The ſauce muſt be a little Claret-wine, ſome minced Oyſters with their Liquor, a grated Nutmeg, and an Onion, with ſweet butter and ſo ſerve it.

To broyl Oyſters.

TAKE the biggeſt Oyſters you can get, then take a little minced Thyme, grated Nutmeg, grated bread, and a little ſalt, put this to the Oyſters, then get ſome of the largeſt bottom ſhells, and place them on the Grid Iron, and put two or 3 Oyſters in each ſhell, then put ſome butter to them, and let them ſimper on the Fire till the Liquor bubbles low, ſupply it ſtill with butter, when they are Criſp, ſeed them with White-wine, and a little of their own Liquor, with a little grated bread, Nutmeg, and minced Thyme, put as much only as to reliſh it, ſo let it boyl it up again, then add ſome drawn butter to thicken them and diſh them.

To pickle Oyſters.

TAKE a quart of the largeſt great Oyſters, with all their Liquor, waſh them clean and wipe them, add to them a pint of White-Wine Vinegar, half an Ounce of whole Pepper, an handful of Salt, a quarter of an Ounce of large Mace, with the Liquor of the Oyſters ſtrained; put all together in a pipkin over a ſoft Fire, let them ſimper together a quarter of an Hour, when the Oyſters are enough take them up, and put them into a little fair Water and Vinegar, till they be cold; let the Pickle boyl a quarter of an Hour after the Oyſters are taken up, both being cold, put them up together; when you uſe them Garniſh the diſh with Barberries and Limon, and a little of the Mace, and Pepper, and pour in ſome of the pickle.

How to ſtew a Mallard.

ROAST your Mallard half enough, then take it up and cut it in pieces, then put it into a Diſh with the Gravy, and as much Liquor as will cover it, then put in a piece of freſh Butter, and a handful of Parſley chopt ſmall, with 2 or 3 Onions, and a Cabbage-lettuce, let them ſtew one Hour, then ſeaſon it with Pepper and Salt, and a little Verjuice, ſo ſerve it.

To ſtew a Diſh of Breams.

TAKE your Breams and dreſs them, and dry them well, and ſalt them; then make a Charcoal Fire, and lay 'em on the Grid-Iron over the fire, being very hot; let them be indifferent brown on both ſides, then put a Glaſs of Claret in a Pewter diſh, and ſet it over the fire to boil, put into it 2 or 3 Anchovies, as many Onions and about half a pint of Gravy, a pint of Oyſter, with a little Thyme minced ſmall, when it hath boiled a while, put to it a little melted Butter and Nutmeg: Then diſh your Bream, and pour all this upon it, and ſet it again on the Fire, putting ſome Yolks of Eggs over it.

To boil a Mullet.

HAVING ſcalded your Mullet, you muſt ſave their Livers, and Roes, then put 'em in Water boiling hot; put to 'em a glaſs of Claret, a bundle of ſweet Herbs, with a little Salt and Vinegar, 2 or 3 whole Onions, and a Limon ſliced; then take ſome whole Nutmegs and quarter them, and ſome large Mace and ſome Butter drawn with Claret, wherein diſſolve 2 or 3 Anchovies;

diſh

diſh up your fiſh and put on your ſauce, being firſt ſeaſoned with ſalt. Garniſh your diſh with fryed Oyſters and Bay-leaves; and thus you may ſeaſon your Liquor for boiling moſt other Fiſh.

To ſtew Flounders.

DRAW your Flounders and waſh 'em, and on the white ſide, being put in a diſh, put to 'em a little White wine, a few minced Oyſters, ſome whole Pepper, and ſliced Ginger, a few ſweet Herbs, 2 or 3 Onions quarter'd, and ſalt; put all theſe into your ſtewing Pan covered cloſe, and let 'em ſtew as ſoon as you can, then diſh them on ſippets; then take ſome of the Liquor they were ſtewed in, put ſome butter to it, and the Yolk of an Egg beaten, and pour it on the Flounders, Garniſh it with Limon and Ginger beaten on the brims of the diſh.

To Roaſt a Salmon whole.

DRAW your Salmon at the Gills, and after it is ſcalded, and waſh't, and dry'd, Lard it with pickled Herring, or a fat Eel ſalted, then take about a pint of Oyſters parboiled, put to theſe a few ſweet Herbs, ſome grated bread, about half a dozen hard Eggs, with 2 Onions, ſhred all theſe very ſmall, and put to it Ginger, Nutmeg, Salt, Pepper, Cloves and Mace,; Mix theſe together, and put 'em all within the Salmon at the Gills; put them into the Oven in an Earthen-pan, born up with pieces of wood in the bottom of the diſh; put Claret-wine, and baſte your Salmon very well over with Butter, before you put it into an Oven, when it is drawn, make your ſauce of the Liquor that is in the Pan, and ſome of the ſpawn of the Salmon

boiled

boyled with ſome melted Butter on the top, ſtick him about with Toaſts and Bay-Leaves fryed, take out the Oyſters from within, and Garniſh the Diſh therewith.

To fry Salmon.

Take a Jole, Chine, or Rand, and fry it in clarified Butter, when it is ſtiff and criſp fryed, make Sauce thereof with a little Claret-Wine, ſweet Butter, grated Nutmeg, ſlices of Orange, and Oyſter-Liquor, ſtew them altogether, and pour on the Sauce, and on that Parſley, Aliſaunder and Sage-Leaves fry'd in Butter.

An Eel to Slice.

Source an Eel with a Handful of Salt, ſplit it down the back, take out the Chine-bone, and ſeaſon the Eel with Nutmeg, Pepper, ſalt, and ſweet Herbs minc'd; then lay a Pack-thread at each end, and the middle rowl up like a Collar of Brawn then boyl it in Water, Salt, and Vinegar, a Blade or two of Mace, and half a ſlice of Limon, boyl it half an Hour, keep it in the ſame Liquor 2 or three Days, then cut it out in round pieces, and lay 6 or 7 in a Diſh with Parſley and Barberries, and ſerve it up with Vinegar in Sauceers.

To Bake a Pickerel.

Boyl your Pickering (but firſt take care he is not ſtale) then pull out the Ribs and Bones, and put it into your Paſte, and ſeaſon it with Pepper and Salt moderately, which done, put in ſome Butter and Raiſins of the Sun, and ſo bake it.

To boil Scollops.

FIRST boil the Scollops, then take them out of the ſhells, and waſh them, then ſlice them, and ſeaſon them with Nutmegs, Ginger, and Cinamon, and put them into the bottom of your ſhells again, with a little Butter, White-wine Vinegar and grated Bread, let them be boiled on both ſides; if they are ſharp they muſt have ſugar added unto them, for the Fiſh is luſcious, and ſweet naturally; therefore you may boil them with Oyſter Liquor and Gravy, with diſſolved Anchovies, minced Onions and Thyme, with the juice of Limon in it.

To Roaſt a Rabbit with Oyſters.

WASH your Rabbit and dry it well, then take half a Pint of Oyſters, waſh them, and wipe them clean one by one, and put them into the Rabbits Belly, a couple of Onions ſhred, whole Pepper, large Mace, 2 or 3 ſprigs of Thyme, ſow up the Belly; and for the ſauce as uſual, the

the Liver and Parſly; and a hard Egg, ſhred them together, and beat ſome Butter thick; put into the Diſh and ſerve it.

To boil a Salmon.

TAKE as much Water as will cover it, then take Roſemary, Thyme and Winter Savory, and Salt, boil all theſe very well, and then put in ſome Wine-Vinegar, and when your Salmon is boiled, let him remain in the ſame Water always until you have occaſion to eat it.

To make an Oyſter Pye.

FRY dry your Oyſters, and then put them into your Coffin with ſome Butter, and whole large Mace, and ſo bake it; then take off the Lid, and fill it with more butter, putting ſome of the Liquor of the Oyſters alſo thereunto, then ſeaſon it well with Sugar, and ſerve it hot to the Table at the firſt Courſe.

To make an Eel-pye with Oyſters.

WASH your Eels and gut them, and dry them well in a Cloth; to 4 good Eels allow a pint of Oyſters well waſhed, ſeaſon them with Pepper, Salt and Nutmeg, and large Mace, put half a pound of butter into the Pye, and half a Limon ſliced, ſo bake it; when it is drawn, take the yolks of 2 Eggs, a couple of Anchovies diſſolved in a little White-wine, with a quarter of a pound of freſh Butter, melt it, and mix it altogether, and make a lear of it, and put it into the Pye.

To

To draw Butter for Sauce.

CUT your Butter into thin ſlices, put it in your diſh, let it melt leaſurely on the Coals, being often ſtirred, and after it is melted, put to it a little Vinegar, or fair Water, which you will; beat it up till it be thick, if it keeps its Colour white, it is good, but if yellow and turn'd it is not to be uſed.

Some proper Terms for Carving ſeveral Sorts of Fiſh.

Barb a Lobſter.
Chine a Salmon.
Culpon a Trout.
Sauce a Capon or Tench.
Fin that Chevin.
Tranch that Sturgeon.
Sauce that Place or Flounder.
Bide that Haddock.
Splay that Bream.
Splat that Pike.
Under-Tench a Porpuſs.
String that Lamprey.
Tame a Crab.
Tranſon that Eel.
Tuſk a Barbel.

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A

Short Diſſertation

UPON THE

CAUSE and CURE

OF THE

PLAGUE

Now raging in *France.*

Digeſted from the Works of Dr. *MEAD*, Dr. *WILLIS*, and others: With variety of excellent Receipts, very neceſſary to be uſed in all Families.

HAving run thro' the ſeveral Heads promis'd in the Title Page, relating to the Improvements of Husbandry in all its ſeveral Branches; as likewiſe the various Obſervations of uſe to the compleat Angler: I ſhall now entertain the Reader, with a more uſeful Subject (eſpecially at this Time, when the Hand of Providence is lifted up with Severity to Puniſh the propoſterous Wickedneſs of the Age) a Subject, which if Seriouſly weigh'd, will put a Man in a Poſture of Defence againſt the ſeveral Attacks of a diſmal Diſtemper now raging abroad: Not that Man is able to contend with his Maker, or in a Capacity to Battle with Death the King of Terrors when his Commiſſion is a Foot; but that Man (firſt unfeignedly Repenting of his Sins) may have the Benefit of uſing thoſe Means, which God in the firſt Creation, appointed for all thoſe who would live worthy of his Mercy.

This being premis'd, that God often Works by *Second Cauſes*, and Bleſſeth the Means he has ordain'd, it remains that I come now to ſhew what Diſtempers may ſoon be brought into our Houſes from abroad, and what Methods ought to be taken in caſe ſo diſmal a Calamity if the Plague ſhould befall us.

And here we will begin with the Opinions of ſeveral of our moſt eminent Phyſicians, *viz.*

THE Learned Dr. *Mead* is of Opinion, that after due Quarantines have been perform'd, that Near to our ſeveral Ports, (ſays he) there ſhould be *Lazarettos* built in convenient Places on little Iſlands, if it can ſo be, for the Reception both of Men and Goods, which arrive from Places ſuſpected

ſuſpected of Infection: The keeping Men in *Quarentine* on board the Ship being not ſufficient; the only uſe of which is to obſerve whether any dye among them. For Infection may be preſerved ſo long in Cloaths, in which it is once lodged, that as much, nay more of it, if Sickneſs continues in the Ship, may be brought on Shoar at the End than at the beginning of the 40 Days: Unleſs a new Quarentine be begun every time any Perſon dies; which might not end, but with the Deſtruction of the whole Ship's Crew.

IF there has been any Contagious Diſtemper in the Ship; the Sound Men ſhould leave their Cloaths; which ſhould be burnt; the Men waſhed and ſhaved; and having freſh Cloaths, ſhould ſtay in the *Lazaretto* 30 or 40 Days. The reaſon of this is, becauſe Perſons may be recover'd from a Diſeaſe themſelves, and yet retain matter of Infection about them a conſiderable Time; as we frequently ſee the *Small-Pox* taken from thoſe, who have ſeveral Days before paſſed through the Diſtemper.

THE Sick, if there be any, ſhould be kept in Houſes remote from the Sound; and ſome time after they are well, ſhould alſo be waſhed and ſhaved, and have freſh Cloaths; whatever they wore while Sick being burnt: And then being removed to the Houſes of the *Sound*, ſhould continue there 30 or 40 Days.

BUT the greateſt Danger is from ſuch Goods, as are apt to retain Infection, ſuch as *Cotton*, *Hemp* and *Flax*, *Paper* or *Books*, *Silk* of all ſorts, *Linnen*, *Wool*, *Feathers*, *Hair*, and all kinds of *Skins*. The *Lazaretto* for theſe ſhould be at

at a Diſtance from that for the Men, and they muſt in convenient Ware-houſes be unpackt, and expoſed, as much as may be, to the freſh Air for 40 Days.

I take it for granted, that the Goods ſhould be opened, when they are put into the *Lazaretto*, otherwiſe their being there will avail nothing. The Misfortune, which happened in the Iſland of *Bermudas* about 25 Years ſince, gives a Proof of this; where, as the Account has been given me by the learned Dr. *Halley*, a Sack of *Cotton*, put on Shoar by Stealth, lay above a Month without any Prejudice to the People of the Houſe, where it was hid; but when it came to be diſtributed among the Inhabitants, it carried ſuch a Contagion along with it, that the living ſcarce ſufficed to bury the Dead.

NOR ought this further Caution to be omitted, That when the Contagion has ceaſed in any Place by the approach of Winter, it will not be ſafe to open a free Trade with it too ſoon: Becauſe there are Inſtances of the Diſtempea's being ſtopt by the Winter Cold, and yet the Seeds of it not deſtroyed, but only kept nnactive, till the Warmth of the following Spring has given them new Life and Ferce.

BUT above all it is neceſſary, that the Clandeſtine Importing of Goods be puniſhed with the utmoſt Rigour; from which wicked Practice I ſhould rt this Time apprehend more Danger of bringing the Diſeaſe from *France*, than by any other Way whatſoever.

AS the Plague always breaks out in ſome particular Place, it is certain, that the Directions of the

the Civil Magistrate ought to be such, as to make it as much for the Interest of Families to discover their Misfortune, as it is, when a House is on Fire, to call in the Assistance of the Neighbourhood: Whereas on the contrary, the Methods taken by the Publick, on such Occasions, have always had the Appearance of a severe Discipline, and even Punishment, rather than of a Compassionate Care: Which must naturally make the Infected conceal the Disease as long as was possible.

THE main Import of the Orders issued out at these Times was, As soon as it was found, that any House was infected, to keep it shut up, with a large red Cross, and *Lord have Mercy upon us* on the Door; and Watchmen attending Day and Night to prevent any one's going in or out, except *Physicians*, *Surgeons*, *Apothecaries*, *Nurses*, *Searchers*, &c. allowed by Authority: And this to continue at least a Month after all the Family was dead or recovered.

IT is not easy to conceive a more dismal Scene of Misery, than this; Families seized with a Distemper, which the most of any in the World requires Help and Comfort, lockt up from all their Acquaintance; left it may be to the Treatment of an inhumane Nurse (for such are often found at these Times about the Sick;) and Strangers to every thing but the Melancholy sight of the Progress Death makes among themselves; with small Hopes of Life, and those mixed with Anxiety and Doubt, whether it be not better to Dye, than to survive the Loss of their best Friends, and neareſt Relations.

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IF Fear, Deſpair, and all Dejection of Spirits diſpoſe the Body to receive Contagion, and give it a great Power, where it is received, as all Phyſicians agree they do, I don't ſee how a Diſeaſe can be more enforced, than by ſuch a Treatment.

NOTHING can juſtify ſuch Cruelty, but the Plea, that it is for the Good of the whole Community, and prevents the ſpreading of Infection. But this upon due Conſideration will be found quite otherwiſe: For while Contagion is kept nurſed up in a Houſe, and continually encreaſed by the daily Conqueſts it makes, it is impoſſible but the Air ſhould by Degrees become tainted, which by opening Windows, &c. will carry the Malignity firſt from Houſe to Houſe; and then from one Street to another.

Dr. *Mead* further adds, and is very preſſing on that Point, that it is a very Dangerous Deſtructive, and Cruel order to confine People to their Houſes, when Infected, by ſhutting them up for a Time, which when open'd again, will let fly all the Poyſon with more Violence than before.

THAT inſtead of Ignorant old Women for *Searchers*, Underſtanding, and Diligent Men ſhould be in their Room, who are capable of making a true Report of the Diſtemper. That upon Infection both Sick and Well ſhould be removed at a certain Diſtance from their Houſes, and a little Diſtance from each other.

NO Manner of Compaſſion and Care ſhould be wanting to the Diſeaſed; to whom, being now in clean and airy Habitations, there would

with

with due Cautions, be no great Danger in giving Attendance. All Expences ſhould be paid by the Publick, and no Charges ought to be thought great, which are counterbalanced with the ſaving a Nation from the greateſt of Calamities. Nor does it ſeem to me at all unreaſonable, that a Reward ſhould be given to the Perſon, that makes the firſt Diſcovery of Infection in any Place; ſince it is undeniable, that the making known the Evil to thoſe, who are provided with proper Methods againſt it, is the firſt and main Step towards the overcoming it.

WHEN the Sick Families are gone, all the Goods of the Houſes, in which they were, ſhould be burnt; nay the Houſes themſelves, if that can conveniently be done. And after this, all poſſible Care ought ſtill to be taken to remove whatever Cauſes are found to breed and promote Contagion. In order to this, the Overſeers of the Poor (who might be aſſiſted herein by other Officers) ſhould viſit the Dwellings of all the meaner ſort of the Inhabitants, and where they find them ſtifled up too cloſe and naſty, ſhould leſſen their Number by ſending ſome into better Lodgings, and ſhould take Care, by all Manner of Proviſion and Encouragement, to make them more cleanly and ſweet.

NO good Work carries its own Reward with it ſo much as this kind of Charity; and therefore be the Expence what it will, it muſt never be thought unreaſonable. For nothing approaches ſo near to the firſt Original of Contagion, as Air pent up, loaded with Damps, and corrupted with the Filthineſs, that proceeds from Animal Bodies.

OUR

OUR common Priſons afford us an Inſtance of this, in which very few eſcape, what they call the Goal Fever, which is always attended with a Degree of Malignity in proportion to the Cloſeneſs and Stench of the Place: And it would certainly very well become the Wiſdom of the Government, as well with Regard to the Health of the Town, as in Compaſſion to the Priſoners, to take Care, that all Houſes of Confinement ſhould be kept as Airy and Clean, as is conſiſtent with the Uſe, to which they are deſigned.

AT the ſame time, that this Care is taken of Houſes, the proper Officers ſhould be ſtrictly charged to ſee that the Streets be waſhed and kept clean from Filth, Carrion, and all Manner of Nuſances; which ſhould be carried away in the Night Time; nor ſhould the Layſtalls be ſuffered to be too near the City: Beggars and Idle Perſons ſhould be taken up, and ſuch miſerable Objects, as are neither fit for the common Hoſpitals, nor Work-houſes, ſhould be provided for in an *Hoſpital* of Incurables.

THE next thing after the purifying of Houſes, is to conſider by what Means particular Perſons may beſt defend themſelves againſt Contagion; for the effectual doing of which it would be neceſſary to put the Humours of the Body into ſuch a State, as not to be alterable by the Matter of Infection. But ſince this is no more to be hoped for, than a Specific Preſervative from the *Small-Pox*; the moſt that can be done, will be to keep the Body in ſuch Order, that it may ſuffer as little as poſſible. The firſt Step towards which, is to maintain a good State of Health, in which we are always leaſt liable to ſuffer by any external Injuries; and not to weaken the Body by

by Evacuations. The next is, to guard againſt all Dejection of Spirits, and immoderate Paſſions; for theſe we daily obſerve do expoſe Perſons to the more common Contagion of the *Small-Pox*. Theſe Ends will be beſt anſwered by living with Temperance upon a good generous Diet, and avoiding Faſtings, Watchings, extreme Wearineſs, &c. Another defence is, to uſe whatever Means are proper to keep the Blood from Inflaming. This, if it does not ſecure from contracting Infection, will at leaſt make the Effects of it leſs violent. The moſt proper Means for this, according to the Advice of the *Arabian* Phyſicians, is the repeated Uſe of *acid Fruits*, as *Pomegranates*, *Sevil Oranges*, *Lemons*, *tart Apples*, &c. But above all of *Wine-Vinegar* in ſmall Quantities, rendered grateful to the Stomach by the Infuſion of ſome ſuch Ingredients as *Gentian Root*, *Galangal*, *Zedoary*, *Juniper Berries*, &c. Which Medicines by correcting the *Vinegar*, and taking off ſome ill Effects it might otherwiſe have upon the Stomach, will be of good Uſe: But theſe, and all other hot *Aromatic* Drugs, though much recommended by Authors, if uſed alone, are moſt likely to do hurt by over heating the Blood.

BUT ſince none of theſe Methods promiſe any certain Protection; as leaving the Place infected is the ſureſt Preſervative, ſo the next to it, is to avoid, as much as may be, the near Approach to the Sick, or to ſuch as have but lately Recovered. For the greater Security herein, it will be adviſable to avoid all Crouds of People. Nay it ſhould be the Care of the Magiſtrate to prohibit all unneceſſary Aſſemblies; and likewiſe to oblige all, who get over the Diſeaſe, to Con-

fine themſelves for ſome time, before they appear abroad.

THE Advice to keep at a Diſtance from the Sick, is alſo to be underſtood of the Dead Bodies, which ſhould be buried at as great a Diſtance from Dwelling Houſes as may be; put deep in the Earth; and covered with the exacteſt Care. They ſhould likewiſe be carried out in the Night, while they are yet freſh and free from Putrefaction: Becauſe a Carcaſs not yet beginning to Corrupt, if kept from the Heat of the Day, hardly emits any kind of Steam or Vapour.

AS for thoſe, who muſt of neceſſity attend the Sick; ſome further Directions ſhould be added, for their Uſe. Theſe may be comprehended in two ſhort Precepts. One is, not to ſwallow their Spittle while they are about the Sick, but the rather to ſpit it out: The other, not ſo much as to draw in their Breath, when they are very near them. The reaſon for both theſe appears from what has been ſaid above concerning the Manner, in which a ſound Perſon receives the Infection.

NEXT

NEXT to the Cure of the Air, (ſaith Dr. Willis) to render that as wholſome as we can; we muſt arm our ſelves againſt taking in that Malignity, which (notwithſtanding all Means of purifying it) ſhall ſtill remain mix'd with it. Now becauſe the Spirits are commonly the firſt that recieve Infection; we muſt fortify them, that they may not eaſily admit the Approaches of their Enemy; which, when they are in full Vigor and Expanſion, they will repel, and, as it were, keep off at a diſtance: Therefore Wine and Confidence are a good Preſervative againſt the Plague. But when the Spirits, thro' Fear, or want of Supply, do recede, and are forc'd to give back, the Enemy enters, and firſt ſeizeth them, and thence gets into the Blood and Humours: Therefore much Faſting and Emptineſs are bad. But every one ſhould Eat and Drink at convenient Hours, in ſuch Manner and Meaſure, as may always keep the Spirits lively and chearful, and endeavour to compoſe his Mind and Affection againſt Fear and Sadneſs.

BUT beſides keeping the Spirits in a good Height, and more eſpecially when that cannot be done, (as in Perſons that are naturally fearful, and of a tender Conſtitution) the Spirits ſhould conſtantly, as it were, be kept arm'd with ſuch Remedies as reſiſt the Poyſon; that is, the Uſe of proper Antidotes againſt the Plague.

I ſhall ſet down ſome *Preſervatives*, to be taken of every Morning, and again at Night by thoſe that live in infected Places.

TAKE of Conſerve of Wood-Sorrel, Four

Ounces; Confectio Liberans, and Mithridate, of each Half an Ounce; Salt of Worm-wood, Two Drams; Confection of Hyacinth, One Dram; Tormentil Roots, and fine Bole, of each Half a Dram; Peſtilential Vinegar, Half an Ounce: Mix all with Syrup of Citron; Take as much as a Nutmeg, Night and Morning.

A Preſervative againſt the Plague.

TAKE of Rue two Handfuls, Figs and Walnut-Kernels, of each twenty-four, common Salt half an Ounce: Which beat all together in a Mortar, till it be well mix'd: Take of it as much as a Nutmeg every Morning and Night

THIS Medicine may be ſeveral Ways advanc'd by adding ſome Alexipharmical Remedies to it; as by putting Salt of Wormwood, inſtead of common Salt, and by adding an Ounce of Venice Treacle to the whole Compoſition.

WHEN the Stomach, by freqnent taking of one Sort of Antidote, begins to loath it: In ſuch Caſes, the Uſe of it may be changed into ſome other: And if the Stomach withal ſhould be ill and defective in Appetite and Digeſtion; let the Party take every Morning, ten or twelve Drops of Elixir Proprietatis, in plain Wormwood Water, or elſe in Wormwood Wine.

THOSE that have Coughs, and ill Lungs, may take five or ſix Drops of Balſam of Sulphur.

THO' Purging in Time of Peſtilence is not good, (as Diemerbroeck, by frequent Examples, ha;

has obſerv'd) yet, in Cachochymick Bodies, it may be convenient, once in a Fortnight, to take a Doſe of Pillulæ Ruffi: Take Half a Dram at Night, and next Morning take the uſual Antidote, as at other Times.

ALSO, for thoſe who live in an infected Air, where there is Suſpicion that they may daily take in ſome peſtiferous Vapours, which fermenting with the Blood and Humours, may inſenſibly at laſt break out in the Plague; it may not be amiſs, once or twice a Week, to take pretty large *Sweats* in there Beds: And this to be done eſpecially, if the Party has had any Occaſion, whereby he may ſuſpect himſelf to have been more open to Infection, or that he has taken any. After ſuch Sweat, he ſhould keep his Chamber the Forepart of the Day, till the Pores are reduc'd to be as they were before.

BESIDES the daily and conſtant Uſe of ſuch Alexipharmical Remedies there are other Means, which occaſionally (and ſometime continually) ſhould be taken. For in regard we always draw in the Air at our Noſtrils and Mouths, theſe Parts ſhould be well guarded with ſome Antidotes, that may keep out the poiſonous Vapours from entring in; and eſpecially, as often as upon Occaſion we are more nearly expos'd to Danger of Infection. To this End, ſome Things to ſmell to, others to be held in the Mouth, chew'd, and ſwallow'd down, are frequently to be inſiſted on.

THAT which ſeems at once to fulfil moſt of theſe Intentions, is, taking Tobacco in a Pipe: The Smoak of this ſecures thoſe Parts which lye moſt open, and at once intercepts

the Contagion from the Brain, Lungs, and Stomach. Nay, more than this, it ſtirs the Blood and Spirits all the Body over, and makes them ſhake off any poiſonous Matter that adher'd to them: Inſomuch that Diemerbroeck accounts it not only a Preſervative, but tells us, that himſelf, when he was ſeveral times infected, by taking five or ſix Pipes of Tobacco together, was preſently cur'd. And amongſt us in England, it is reported, that in the laſt great Plague, no Tobacco-Shop was infected. If it is not of ſo great Vertue ſtill amongſt us, the Reaſon is, becauſe moſt Men have been accuſtomed to take it ſo exceſſively; wherefore it is grown ſo familiar to them, that it produceth no Alteration when it ſhould be us'd as an Antidote.

BESIDES the frequent Uſe of Tobacco, which doubtleſs in a Time of *Peſtilence* may be profitable for thoſe that can take it; others, and alſo Tobacconiſts, at ſome Times ſhould be furniſh'd with ſomething to ſmell to, when they paſs through infected Places: Wormwood, Rue, Galbanum, Caſtor and Vinegar are good; The vulgar Practice of putting Mithridate, or Treacle, or Tar in their Noſtrils, may be very uſeful.

MYRRH Likewiſe chew'd is very excellent. Some commend Tobacco, and chew it almoſt continually.

THESE are the chiefeſt Remedies, which help to keep Infection out of the Body.

THERE is yet another Sort which ſerves to let it out, and carry it away, before it grows to a Head, *viz.* Iſſues, which have been often found by Experience to be good Preſervatives in

in a Time of Plague: Forasmuch as Nature having a constant Vent for excrementitious Matter thrown off the Blood, by the same Way expels poisonous Atoms soon after they are receiv'd into the Body.

CONCERNING Rules of Diet, I need not say much, because such Precepts are commonly known: 'Tis to be observ'd in general, that only wholsome Food should be taken: Very salt Meats, as Hung-Beef, Bacon, Pork, Salt Fish, also Shell-Fish; most Kind of Herbage, and raw Fruit should be avoided. The Meals should be moderate, and eaten in due season. Some Antidotal Things may be taken with the Meat, or mix'd in the Sauce: Clove-gilliflowers pickled, also Citron-Peel and Juice, Rasberries, Currants, Pomegranate Juices, Pestilential-Vinegar, and Mustard made with the Seeds of Thlaspi, may be of some good Effect.

IN the Use of Means, Caution is to be had, that strong and hot Cordials be not too often taken, nor yet indifferently by all People; for that will inflame the Blood, and make it apt to kindle a Fever, which at such times soon turns to the Plague.

THE like Caution is to be had against immoderate drinking of Wine; though a moderate Proportion chears and fortifies the Sprits, yet too much greatly disorders them, and thereby People are more expos'd to take Infection.

LETTING of ~~Blood~~ for the Plague, has been observ'd to be very pernicious; so also frequent or strong Purging; for the Veins being emptied either way, will readily suck in whatever poisonous Atoms lurk in the outward

Pores of the Body, which being depauperated, are less able to subdue or repel them.

THE CURE of the PLAGUE admits of no Delay; neither indeed is their Need of any Deliberation what ought to be done; but as soon as any one finds himself infected, let him forthwith take to his Bed; and having pray'd to Almighty God for his Blessing, begin to use the following Means.

IF the Party is much oppress'd at his Stomach, and strains to Vomit, or else with vomiting throws up bitter and stinking Matter; let him instantly take a large Draught of Carduus, or Camomile Posset Drink; and in it, either half a Dram of Salt of Vitriol, or two Ounces of Liquor of Squills, and with his Finger, or a Feather, fetch up what is contain'd in his Stomach; but take no Antimonial Medicine, that will work beyond the Stomach. As soon as he has vomited, (or if there is no Occasion for this Evacuation) let him presently be put into a Sweat, and continue in it for Twelve Hours, more or less, according as his Strength will hold out, and not sleep in it, or at least not till the latter-end of it.

IF when he begins to sweat, or endeavours it, his Vomiting still continues, then apply to the Pit, of the Stomach a Toast of White-Bread, spread with Treacle or Mithridate, and dipt in Claret-Wine, or Pestilential Vinegar, made scalding hot in a Pewter Dish. Wrap this in fine Linnen, and apply it very hot.

AFTER a plentiful Sweat for Twelve Fourteen, or Eighteen Hours, give him some Refective;

as,

ss, Broth, Caudle, Mace-Drink, or the like; and a little while after, ſuffer him to ſleep if he can. Then give him temperate Cordials, by way of Confection, or Julep, or both; which repeat, every Third, or Fourth Hour. Alſo, at the Time that the Party ſettles to Sleep, lay Veſicatory Plaiſters behind the Ears, and under the Arm-pits, and alſo in the Groin.

AFTER he has ſlept, or endeavour'd it, and his Spirits are pretty well refreſh'd, at a moderate Diſtance from the firſt Sweating, (*viz.* Eighteen, or Four and twenty Hours, ſooner or later, according as Symptoms are more or leſs urgent, and his Strength is able) repeat the Sweating again; and ſo proceed through the whole Cure; one while Sweating, and another while refreſhing his Spirits by temperate Cordials and Sleep: Betwixt whiles adminiſtring fit Nouriſhment, until ſuch Time as the Symptoms are wholly abated, and either the Diſeaſe terminated, or elſe the Malignity is driven all out in Boils or Carbuncles; and how they muſt be order'd, Directons ſhall be given.

THO' the ſame Kind of Sudorificks may be given indifferently to moſt People, yet becauſe there is a Variety of ſuch Medicines, in reſpect both of the Matter and Form of them, therefore ſome Choice may be had in the Adminiſtration of them, that ſo we may comply with the Patient's taking them beſt in this, or that Kind of Form: And alſo that thoſe which are hotter, be given to Perſons of a Cold Temper; and thoſe Medicines which are more temperate, to ſuch whoſe Conſtitutions are Hot. I ſhall ſet down ſeveral Forms of Sweating Medicines, which are given either in Potion, Bolus, or Powder.

POTIONS

POTIONS.

TAKE of ſmall Plague-Water, two Ounces; Peſtilential Vinegar, half an Ounce; of Venice-Treacle, one Dram: Mingle them.

TAKE of Butter Burr-Water, three Ounces; Venice-Treacle, Diaſcordium, of each a Dram; Peſtilential Vinegar, one Spoonful. Mix them.

IN a Spoonful or two of Treacle-Water, or Vinegar, or both mix'd: Give fifteen or twenty Drops of Spirit of Hartſhorn, or of the ſimple Mixture from half a Dram to a Dram; or of Balſam of Sulphur, from ten to twenty Drops, or fifteen Drops of Elixir Proprietatis.

FOR the Poorer Sort of People, make Poſſet-Drink with Peſtilential Vinegar, and boil in it ſome Butter-Roots, and give a Draught hot.

Or make this Potion.

Take good Celandine and Rue, of each one Handful, Marigold Flowers half a Handful: Boil theſe in a Quart of White-Wine Vinegar; ſtrain it out, and keep it in a Glaſs Bottle; give two or three Spoonfuls, in which diſſolve of Venice-Treacle, or Mithridate, one Dram. This will provoke Sweat very powerfully.

SOME commend a Decoction of Guiacum, to provoke Sweat, as in the Cure of the French-Pox.

A plain Decoction of Rue in White-wine, with a little Vinegar added to it, is highly commended by others.

SEEDS of Rue powder'd, and one Dram of it mix'd with half a dram of Treacle; diſſolv'd with White-Wine, is accounted an excellent Sudorifick.

SUDORIFICK Medicines may be given in Powder thus.

TAKE of Virginian Snakeweed, Contrayerva, and Gaſcoigne Powder, or Lady Kent's Powder, of each one Scruple; give it in two Spoonfuls of Poſſet-Drink, or of a Cordial Julep, or in Syrup of Gilliflowers.

TAKE of Bezoartica Mineralis, half an Ounce; of Species Liberans, two Scruples; Camphire, eight Grains: Mingle them.

TAKE of the Flower of Sal Armoniack, half a Scruple; of Ceruſſe of Antimony, one Scruple; of Bole Armonick, one Scruple: Mingle them.

GIVE any of theſe in a Spoonful or two of any Liquor, or in a Spoonful of Sack, with as much Peſtilential-Vinegar; half an Hour after, drink a Draught of Poſſet-Drink, with Medeſweet or Woodſorrel boil'd in it.

TAKE of the Powder of Ivy-Berries, one Dram: Give it in a Draught of warm White-Wine, with a Spoonful of Peſtilential Vinegar.

TAKE Powder of the Roots of Carline Thiſtle: Give it in the ſame manner.

LIKEWISE Powder of Butter-Burr-Root, given in the ſame manner, provoketh Sweat powerfully, and expelleth the Poiſon of the Plague.

IF the Patient can beſt take his Medicine in a Bolus;

TAKE of Venice-Treacle, one Dram; Tormentil Roots, Bole prepar'd, of each one Scruple; Syrup of Gilloflowers, as much as ſufficeth.

TAKE of Conſerve of Roſes, half a Dram; Balſam of Sulphur, fifteen Drops: Mix them. Take Poſſet-Drink, half an Hour, or an Hour, after any of theſe.

IN

IN Time of Sweating, give the Patient Poſſet-Drink made with Peſtilential Vinegar: Boil in the Milk Scordium, or Marigold Flowers. If he is very dry, boil Medeſweet, or Wood-Sorrel. If he is ill at Stomach, and apt to vomit or faint, give Claret-Wine, burnt with Cinnamon and Zedoary Root, and Mint-Water mixt with it: Or elſe give him Beer boil'd with a Cruſt of Bread and Mace, and ſweeten'd with Sugar. Beſides, to the Richer Sort, give now and then a Draught of Cordial Julep, and ſometimes a Doſe of Cordial Electuary: Which Kind of Medicines ſhould be given likewiſe after Sweating is over, once in three or four Hours, (of one or other) to refreſh the Spirits, and to keep the Malignity from the Heart. Give him no cold Beer in two or three Days.

AFTER Sweating, waſh the Mouth with White-Wine Vinegar, and Roſe-Water: Alſo dip a Spunge in the ſame warm; and gently ſtroke the Temples of the Head, and Noſtrils with it.

BETWEEN whiles, give of the Medicines following.

TAKE Wood-Sorrel Water, and Dragon Water, of each four Ounes; Scordium Water, two Ounces; Treacle-Water, (or Plague-Water) one Ounce and a half; Syrup of Gilloflowers, (or of Juice of Citrons) two Ounces; Pearl, finely powder'd, one Scruple; Spirit of Vitriol, twelve Drops. Mix them.

Or make a Decoction thus:

Take of Hartſhorn raſp'd, and Ivory, of each three Drams; a Pearmain ſlic'd, Wood-Sorrel, half an Handful boil theſe in three Pints of Water, till a third Part is waſted; ſtrain it on two Ounces of Conſerve of Gilliflowers, or Wood-Sorrel, or Red-Roſes. Let it infuſe an Hour; then ſtir it, and ſtrain it out. Give a Quarter of a Pint warm.

WHEREAS we give Emulſions made with ſuch a Decoction and Almonds, and cold Seeds in Fevers, *Diemerbroek* affirms, upon his frequent Obſervation, Emulſions never do well in the Plague.

Take of the Conſerve of Wood-ſorrel, four Ounces; of the Rob of Goosberries, or Rasberries, two Ounces; Species Diarrhodon Abbatis, two Drams, Confectionis Liberantis, one Dram and a Half; of prepar'd Pearl half a Dram, Red Coral prepar'd, one Dram; with a ſufficient Quantity of Syrup of Juice of Citron. Let it be made an Opiate. The Doſe is one or two Drams, often in a Day.

SOMETIME

SOMTIMES the Plague is accompanied with dangerous Symtoms, to which, if Remedies are not inſtantly applied, all we do beſides is to little purpoſe. Such Accidents, which call for reſpective Ways of Cure, are chiefly Fluxes of Blood, and Looſeneſs of the Belly, and Vomiting.

THE firſt uſe to happen ſeveral Ways, *viz.* at the Noſe and Mouth, by Stool or Urine, by the *Hæmorrhoids* or *Piles*, and in Women by Menſtrual Purgations: Some of which, as by Urine always, and oft-times by Stool, are mortal; none of them ever tend to good. Therefore in all ſuch Caſes, Remedies muſt be adminiſtred which may ſtop Bleeding: And though Sweating and Refection of the Spirits be ſtill the principal Intention of Cure, yet the other muſt come in as collateral with both of them; and Medicines that reſtrain Fluxes of Blood ſhould be mixed both with Pudorificks and other Cordials, and alſo be adminiſtred with Diet too.

IN all Hæmorrhages, Pudorificks muſt be compounded of Medicines that are temperate, and not aſtringent.

IN the Cure of the Plague, if a Courſe of Sweating, timely adminiſtred, do plentifully ſucceed, and withal other private Excretions be either prevented, or preſently ſuppreſs'd, the Patient may be judg'd to be in a hopeful Condition; and ſometimes the Venom is quite expell'd, without any other Accident: But for the moſt part, becauſe the Poiſon, by fermenting the Blood and Humours, is ſoon greatly increas'd; ſo that the whole Maſs of it eſpecially the groſſer Particles, cannot eaſily evaporate; it ſettles in the outward Parts, and there cauſeth Swellings and Breakings out of divers Kinds: Thoſe that require any Application of Remedies, are Boils and Carbuncles.

THE firſt of theſe, commonly happen in Parts that are very Glandulous; as behind the Ears, under the Arm-pits, and in the Groin: They riſe with a hard Swelling, which ought to be ſuppurated and broke, and the Corruption to be drawn all out, by the running of the Sore for ſome time. Thoſe Tumors, call'd Buboes, ſhould be ordered thus.

IF a Bliſter is not rais'd on, or near the Place already, it is good to apply a Veſicatory-Plaiſter juſt below it; but on the Tumor it ſelf to apply ſome drawing Medicine, to attract the Venom outward; as at firſt, the Fundament of ſome living Fowl, or elſe a Colewart-Leaf dipt in ſcalding Water, and dry'd again, and ſpread over with Oyl of Lillies, or Scorpions.

TO ripen the Sore, lay on Pultiſes, or Plaiſters; or rather, firſt Pultiſes, and then Plaiſters, when it tends to Suppuration; which ſhould be renewd every Twelve Hours at leaſt.

For

For Pultiſes.

TAKE an Onion, and White Lilly-Roots; boil them, or elſe wrap them in a wet Paper, and roaſt them in the Embers; afterwards ſtamp both together, adding a little Treacle, and Oyl of Lillies, as much as is ſufficient: Or elſe roaſt a Fig, with either, or both theſe above-nam'd, and make a Pultis in the ſame manner: Or elſe, with either, or all above-nam'd Remedies, add an Handful of Scabious, or Sorrel waſh'd; and after beat all into a Pultis.

TAKE Pimpernel roaſted on the Embers, mollify it with Oyl of Scorpions, adding a little Powder of Myrrh and Venice-Treacle, and lay it to the Sore.

SOME recommend Live Frogs to be apply'd, and renew'd as oft as they die

FOR a Plaiſter to break the Sore when it is open'd, Diachylon with Gums: Or elſe thoſe two Emplaiſters, *viz.* Emplaſtrum Paracelſi, and de Fuligine, mention'd by Diemerbroeck, *p.* 2. 13. Paracelſu's Plaiſter is there thus order'd to be made:

TAKE

TAKE of Gum Oppopanax, two Ounces; Seraphin, or Sagapen, four Ounces; Bdellium, three Ounces; Galbanum, one Ounce; Olibanum, two Drams: Let them be diſſolved in Vinegar, and ſtrain'd; and adding the Powder of a dry'd Toad and Frog; of Natural Brimſtone, one Ounce; of Camphire, one Dram. Let it be made a Plaiſter, to be put upon the Tumor, and renew'd every ſix Hours.

EMPLASTRUM de Fuligine, or, Plaiſter of Soot, is thus made.

TAKE of Chimney-Soot, ten Drams; Leaven, Turpentine, Butter, of each one Ounce; Venice Soap, one Ounce and a half; Honey of Roſes, ſix Drams; common Salt, half an Ounce; the Whites of two Eggs, Treacle and Mithridate, of each two Drams: Let them be mix'd. For the poorer Port, Shoemaker's-Wax is as good as any.

IF when the Tumor is ripen'd, it does not ſoon break of it ſelf, it is beſt to open it by Inciſion; and when it is broken, put in a Pledget dipp'd in Turpentine, mix'd with the Yolk of an Egg; or dreſs it with Baſilicon alone, or the Liniment of Arceus.

A Carbuncle, which is the other Kind of Plague-Sore, which requires the Operation of the Hand, happens but ſeldom in any of the Emunctories; and when it does, it portends ill; but uſeth to be in moſt places elſe. It riſes with angry Puſtules; ſometimes one, ſometimes many; which ſoon grow diſcolour'd, and tend to Mortification: And the Subſtance mortify'd muſt firſt be caſt out, and then the hollow Ulcer which remains, muſt be heal'd.

WHEN a Carbuncle firſt appears, Diemerbroeck reccommends to be apply'd to it, for the Firſt and Second Day, a Red Colewart Leaf, ſpread over with Rape Oyl. The ſame Author mentions a Pultis, which he us'd for the moſt part; renewing it three or four times in four and twenty Hours, till the Core was taken out; and then Digeſtive Medicines, and others ſucceedingly, are to be us'd, as in other Ulcers.

TAKE Scabious and Devil's Bit, of each two or three Handfuls ſtamp them, and then beat them with the Yolks of two Eggs, and a little Salt: Lay it to the Carbuncle warm renewing it three times in a Day at leaſt.

Some

Some more useful Instructions, whereby People may be their own Doctors, and save the Expence of Physicians *and* Apothecaries, *and recover their Health with little Damage to their Pockets.*

For a Cough.

TAKE three quarters of a Pound of blew *Currants*, Thirty Fat *Figgs*, Twelve *Dates*, and two drams of the Roots of *Elecampane* thin sliced, two Ounces of sliced *Liquorish*, and of *Lung-wort* and *Maiden-Hair*, of each a large Handful. Boil them for the space of an Hour and a half in nine Quarts of Spring Water, strain the Liquor, and when it is Cold, let the Sick Person Drink half a Pint in the Morning Fasting, and the like Quantity at five a Clock in the Afternoon. As he goes to Sed mix an Ounce of *Diacodium* in half a Pint, and for the first and third Night let him Drink half of it, and keep the rest to Sip in the Night, when the *Cough* troubles him. The Second Night he may Drink half a Pint going to Bed, without *Diacodium*. A Quarter of each may suffice for a Child. If this will work the desired Effect, (tho' I never knew it fail, but all Constitutions differ) then the last Remedy is to cut an Issue in the Arm.

For

For a Sore Breaſt.

TAKE *White-Lilly-Roots* and waſh them Clean, *Green Hemlock* one or two Handfuls, ſhred them very well together, and then put one or two Handfuls of ſmall *Oat-meal* to them, and mix them well together: This being done, put ſome Milk in a Sauce-pan or other Veſſel, and place it on the Fire, when it begins to boil, put in the Ingredients till it comes to the Conſiſtency of a thick Pultice, ſtirring it all the time. Take it from the Fire, and Spread on a Napkin four double, and apply it to the Breaſt as hot as the Perſon can bear it. Shift twice every Day, 'till the Breaſt begins to Heal, and then once a Day will ſerve. This will Draw and Heal, tho' the Breaſt has ſeveral Holes in it, but then you muſt remember to keep the Breaſt warm. *N. B.* If you take ſix Score *Hog-Lice*, or (as they are otherwiſe called) *Wood-Lice*, and bruiſe them into a quarter of a Pint of *White-wine*, and give the Liquor to the Sick Perſon to Drink every Morning Faſting, it will haſten the Cure, and carry off thoſe Humours which may lurk behind.

For Inflamed Eyes.

If the Perſon be arrived to Maturity, take away ten Ounces of Blood from the Arm; then uſe the *Hog-Lice* and *White-wine* as before mentioned, and waſh the Eyes with *Crowders-Well-Water*, or the beſt Spring-Water, make the following Potion. Take *Bole-Almoniack* four Ounces, *Camphire* one Ounce, *White Coperaſs* Ounces; boil the *Coperas* and *Camphire* in an Earthen Pan well Glaſed, till they are melted,

and

and ſtir them continually till they grow hard again. Beat all theſe Ingredients till they are very fine, and well mixt, then put three Spoonfulls of them into two Quarts or three pints of Running-Water, which has been boiled, and has ſtood till it be cold; mix them well together, and when it has ſettled worm ſome of it, and waſh the Eyes twice every Day.

FINIS.

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